THE BUILDER
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Lyddington Bede House, Rutlandshire.

From a Sketch by Sir Banister Fletcher, P.R.I.B.A.

MEETINGS

Saturday, *November* 8.

Royal Institution. Mr. A. H. Smith on "Some Recent Archæological Work in Italy." 3 p.m.

Monday, *November* 10.

Surveyors' Institution. Presidential Address by Mr. E. H. Leeder. 8 p.m.

Tuesday, *November* 11.

Institution of Heating and Ventilating Engineers. Mr. A. Hindley on "Some Unusual Jobs." At Manchester. 7 p.m.

Institution of Electrical Engineers (Scottish Centre). Dr. J. J. Rudra and Professor Miles Walker on "The Theory and Performance of Phase Advancers." At 39, Elmbank-crescent, Glasgow, C.2. 7.30 p.m.

Wednesday, *November* 12.

L.C.C. Central School of Arts and Crafts. Sir Banister Fletcher, P.R.I.B.A., on "Italian Mediæval Architecture." At Southampton-row, W.C.1. 6 p.m.

London Society. Visit to the Whitefriars Glass Works, Cecil-road, Wealdstone. 2.30 p.m.

Royal Society of Arts. Professor A. E. Richardson on "The Royal Society of Arts Competition of Industrial Designs." 8.30 p.m.

Royal Academy of Arts. Professor A. P. Laurie on "Rembrandt and his Pupils." 4 p.m.

Liverpool Architectural Society. Mr. Joseph Emberton on "Influence of Modern Materials on Architectural Treatment."

Institution of Structural Engineers (Lancashire and Cheshire Branch). Paper by Dr. Oscar Faber. At Manchester. 7 p.m.

Institute of Fuel. Mr. James Cunningham on "Graphical Methods of Fuel Control." 6 p.m.

Thursday, *November* 13.

Institution of Structural Engineers. Mr. C. H. Cottew on "A Comparison of England and Foreign Building Laws." 6.30 p.m.

Royal Academy of Arts. Professor A. P. Laurie on "Modern Pigments: their proper selection and use." 4 p.m.

Society of Antiquaries. Mr. W. A. Heurtley on "Excavations at Servia in Macedonia." 8.30 p.m.

Auctioneers' and Estate Agents' Institute. Mr. Edgar Whittindale on "The Agricultural Holdings Act, 1923—Compensation for Disturbance under Section 12." At the Queen's Hotel, Birmingham. 3 p.m.

L.C.C. Geffrye Museum. Mr. A. T. Bolton on "Furniture and Decoration of Robert and James Adam." 7.30 p.m.

Builders' Benevolent Institution. Annual Dinner. At the Hotel Victoria, W.C.2. 7 p.m.

Institution of Welding Engineers. Mr. A. E. Shorter on "Metal Surface Hardening." 7.45 p.m.

Friday, *November* 14.

Illuminating Engineering Society. Mr. J. A. Macintyre on "Lighting of Offices and Public Buildings." At 18, John-street, W.C.2. 6.30 p.m.

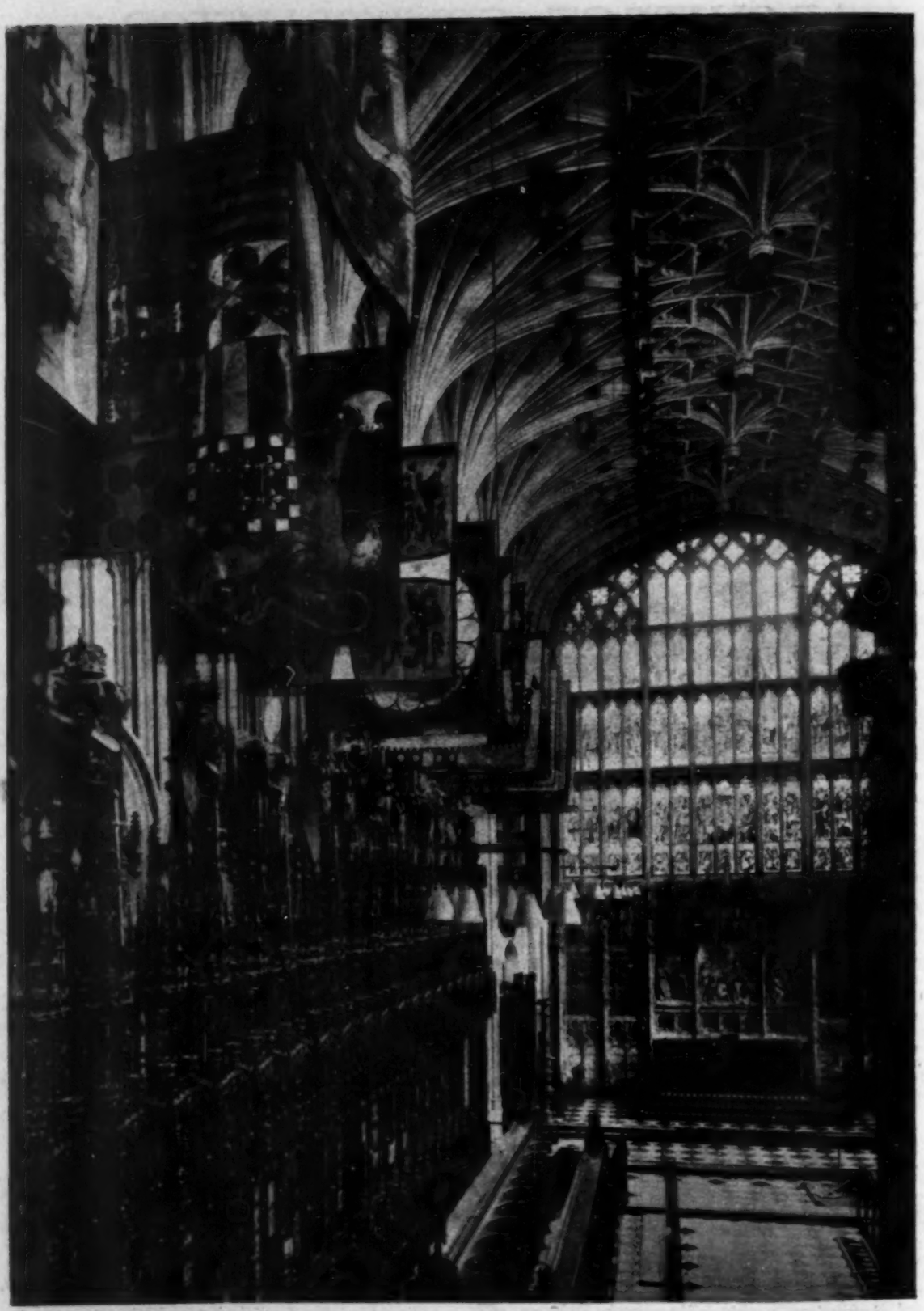
Royal Academy of Arts. Professor A. P. Laurie on "Painting Media: Oils, Varnishes, and Tempera." 4 p.m.

South-Eastern Society of Architects. Smoking Concert. At Booth's Restaurant, East-street, Brighton.

Town Planning Institute. Presidential Address by Mr. F. W. Platt. 6 p.m.

Institution of Structural Engineers (Midland Counties Branch). Discussion on "Stresses in Angle Sections," opened by Mr. F. C. Bridge. At Birmingham. 7 p.m.

Chadwick Public Lecture. Mr. J. H. Coste on "The Object and Methods of Sewage Treatment." At 9, Condnit-street, W.1. 8.15 p.m.



St. George's Chapel, Windsor, as Restored.
(*See page 774.*)

ARCHITECTURE AND THE MOTOR

HOWEVER the modernists may claim otherwise, the house and the motor-car are at opposite poles of reality. To claim otherwise is to confuse the static or dynamic principles upon which one or the other is based. The building of a home is a venture which previsions a lifetime, for though families, like businesses, have at times to move into "larger and more commodious premises," and though, like businesses, the family looks upon such events as the reverse of calamity, the home that is left must serve some other family arrived at the original state of the first. The home becomes, therefore, something less allied to fashion than most things of human making. On the other hand, the motor-car is very much a matter of fashion, and is chosen with no other intention than a few years of user, and then another change. It may change a few times through hands not frightened to touch the second-hand article, but it passes quickly to the scrap-heap. The twenty-year-old motor-car is a museum exhibit; the twenty-year-old house has hardly the bloom worn off it.

If from these reflections the conclusion were reached that the motor-car bore no relation to architectural development, the surging crowds which have visited Olympia during the last few weeks might be taken as so many people indifferent to architecture and otherwise absorbed. Such a conclusion would be a striking misreading of fact and event. Architecture is such an intimate concern of every civilised man or woman, that there is no interest or tendency in modern life which does not in some way react upon, or reflect itself in, the architecture of our times.

The advance which has been made in mechanical science within the last thirty years is so amazing that we find little time to think about it, and far less, perhaps, to anticipate further events. The change from times when the mechanically-propelled carriage was a thing for wonder and suspicion, regarded as the toy of a lunatic, rather than as the sign of far-reaching development, to these days of an almost universal road habit, has been so uniform in its rapid progress as to appear much as the slower changes of normal civilised progress. It is, perhaps, seasonable as well as sensible to review a few of the directions in which the coming of the motor-car has affected buildings and the design of buildings, as well as the character of our town plans, adjusted from old accidental incidences, or projected afresh where the new district is opened to development.

In the latter category stand the new arterial roads which have no prototype upon which to model, and suffer the defects which are typical of any new venture. To the coming of the motor-car is entirely due this new characteristic of road building. Wide and level, so far as major obstacles will allow, these new arteries burrow into the hillside, or hump themselves above the meadow land, with almost as much disregard of contour as the railways showed when they were launched upon the countryside a century ago. The hard stone-like curb, so recently limited to the urban areas, now appears in the heart of the country wherever the substantial surface which the motor demands needs support from crumbling We may resent this intrusion into rural England, though it is unjust to judge too hardly at this early stage. Possibly in a generation, when the bare embankments have grown over, and the young trees which authorities with forethought have provided to line these great roads, have become mature and dominant, the judgment upon the post-War arterial road may be upon something rather fine and grand. Of one thing we may certainly judge gratefully: that the hard impermeable surface of the motor road has meant a minimum of dust, with a greener roadside midsummer than the old white-mantled country lanes could boast at the same season.

The petrol pumps have come among us, and show little sign of thinning. But against this we may at least take comfort from the fact that few people are now indifferent to these blemishes, and that many businesses are coming to realise that the necessary fuel for the motor is taken more gratefully from decent establishments than from the discourteous tin hut. We may expect a rapid improvement in the design of the filling stations of the future, so that this grievous blot which the motoring industry has to wipe out may soon be removed from our midst. We see a similar tendency in the design of the wayside café. Here there is a distinct tendency to respect the principles of simple architecture, where once the board with six-foot letters was thought sufficient appeal.

These are the first and more obvious reflexes of the popular motor car. But there are others as easy to recognise where the relation is harder to find. The extraordinary efficiency of the motor manufacturing industry in this country has put the small family car just within reach of the small man. The possession of a car has none of the snobbish element about it which the desire for more useless things possessed by the next social grade has had. The ability to explore distant country in one's own time and at one's own choice, is an ambition which can be easily appreciated. So strong is it that there are many people who are willing to sacrifice other things which were once considered indispensable, to realise this one. With a wide section of the public, the desire for a comfortable and well-ordered home is less active than the desire to get away from it whenever possible; and we may take it that the popular motor-car industry has had a bad effect upon the popular home industry. We laugh at the Victorian who christened his pretentious semi-detached house a "villa," but at least it showed him to be on the road to an ambition. Now the motorist of 1930 calls his cottage at the other extreme of irreverence—the "Shack," or the "Hut"—and asks no more of it than that it shall possess a garage, or "room for a garage," in which latter case a monstrosity of asbestos sheeting is likely to spring up after his occupation. The estate he chooses can have neither the dignity of a street, because it must have its sequence of gaps for the ubiquitous motor house, nor the spaciousness of a country estate, because he has neither the desire for a large garden nor the time to maintain one.

To this loss of reverence for the home, and for home life as we have known it, is due much of the ugliness of the newer suburbia, and distance and seclusion are no protection against the invasion of the mechanised urban worker. In response, the architects are exercising themselves as to how to treat with comeliness and decency the brick cube which seems to hold all the suburban motorist wants in the way of a home; and how to lay out, with some sense of charm, an estate which consists of an endless rhythm of small and tiny units—the house and the motor house. We cannot say that a solution to either of these problems of taste has yet been found. It may be that we shall yet revert to the dignity of street architecture, in which narrow frontages combine in dignity, with some reversion to the idea of mews, as the smart Londoner of earlier centuries resolved the clash of home dignity and stable shabbiness.

Yet another influence which the growth of car ownership has had is the congestion of traffic, which has become so serious a problem in all cities, and nowhere more so than in the Metropolis. We persuade ourselves that in this new advance of mechanical science we have greatly speeded up life. Yet many of us know that it takes longer to cross London above ground nowadays than was the case twenty years or so ago. The object seems to have defeated itself at this point, or at any rate it has seriously over-reached itself. A wide circuit of city garages, possibly on several floors, reached from ramps or lifts, may restore the balance in good time; but it seems likely that a limit of road user, which experience may dictate, may set also a limit to the floor area which the unit area of City land may carry. In other words, we may reach a set limit to the height of City buildings from necessity more than from ordinance. If this prove the case, the Londoner will not complain, for already our streets are growing deep enough. In all these things we have to accept the state of affairs which progress brings with it, and to make the best of the conditions. The architects and the builders can do more than any others to anticipate the points at which we may soon find ourselves, both in the city and the country.

NOTES

The Royal Gold Medal.

Probably the most enduring distinction that an architect can receive, and certainly the highest honour the Royal Institute of British Architects can bestow, is that of the Royal Gold Medal for the promotion of architecture, which is annually conferred on some distinguished architect or man of science or letters. To the architect recipient, there can surely be no greater gratification than the fact that the honour is conferred by his brother architects with the approval of the reigning sovereign; and that the selection is not lightly made, and that the choice is generally unanimous, must add to the value of the honour. In selecting Sir Edwin Cooper, A.R.A., as the recipient of the medal for the year, the Council of the R.I.B.A. have made a choice which will be unanimously approved by the profession and by all those who are acquainted with the many admirable architectural works of Sir Edwin, and are adding to the list of distinguished men who have already received the medal the name of one who, by the honourable practice of his art and by the high level of his accomplished work, is well entitled to the distinction which the award of the medal carries with it. We know we are expressing the views of the profession when we heartily congratulate Sir Edwin on this well deserved honour.

The Value of Public Buildings.

Some instructive comments on the value of a far-seeing and progressive policy was afforded by the Chairman of the Purley and Coulsdon Urban Council on the occasion of the opening of their well appointed new council buildings by the Lord Mayor on Monday. It was made clear that the erection of public buildings on a central and convenient site leads to a large increment value on all the surrounding property, and promotes an enterprising policy all round. As the chairman pointed out, the expenditure of some twenty - six thousand pounds on public buildings may be looked upon as a profitable expenditure, and the cost to the ratepayers is measured by the fact that the occupier of a house rated at £32 a year contributes only two shillings and eightpence per year towards this.

Public Buildings in Edinburgh and Their Sites.

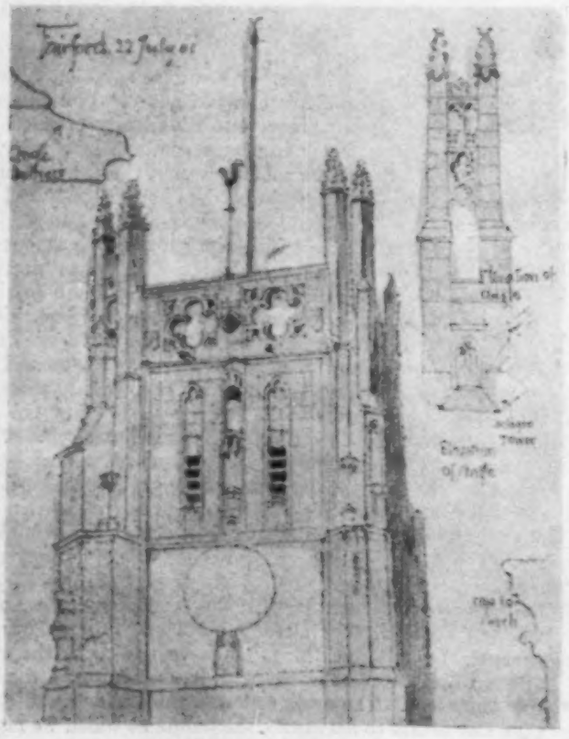
Whether an open competition can settle it or not, we may surely feel that we should get nearer to a settlement of a proper scheme for dealing with the sites for prominent public buildings in Edinburgh if architects were given a chance to solve the problem. This need for energetic action by the City Council appears urgent enough.

Iconoclasts.

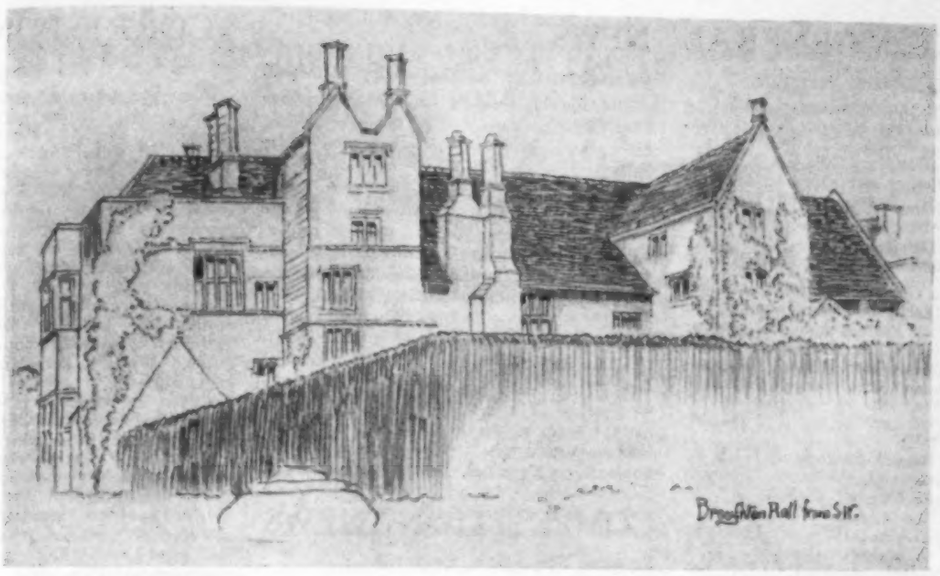
From an architect's point of view "R. L. S." is at his best when he joins with Ruskin in his opinions upon "Villa" architecture. These villas "belong to no style of art, only to a form of business much to be regretted. . . . On the other hand, there is a noble way of being ugly, a high aspiring fiasco like the fall of Lucifer. There are daring and gaudy buildings that manage to be offensive without being contemptible; and we know that 'fools rush in where angels fear to tread' . . . If the population of Edinburgh were a living, autonomous body, it would arise like one man and make night hideous with arson; the builders and their accomplices would be driven to work, like the Jews of yore, with the trowel in one hand and the defensive cutlass in the other; and as soon as one of these masonic wonders had been consummated, right-minded iconoclasts should fall thereon and make an end of it at once." Mr. Lansbury, it has been said, has always been credited with the desire to do the right thing. In this instance his task should be easy, whatever his official views may be. No other city can claim a higher degree of civic pride, and no other city can claim better spokesmen or more loyal sons.

Educational Developments.

During the last few years there has been a great deal of development in all kinds of school building. Many new schools have been erected, both in new housing districts and overcrowded areas, and extensions and modern ideas have been introduced into a large number of existing schools. The country has given assistance to these schemes; indeed most people will applaud them, for education is admittedly one of the most important factors in the life of us all. Nowadays the method of planning a modern school is vastly different from what old-fashioned architects arranged, and we are safe in assuming that a great deal more thought is given to such matters as light and air for the sake of health and such matters as sanitation and public services. In this connection one notices that the small private schools have largely been closed. A few years ago most towns had a large number of them, chiefly being large private houses with the



From Sketches by Sir Banister Fletcher, P.R.I.B.A.



From a Sketch by Sir Banister Fletcher, P.R.I.B.A.

principal rooms used as classrooms. There are, however, still many of these out-of-date private schools in existence, and although in some cases they are quite attractive places for the teaching of young children, yet there is much room for improvement in the buildings themselves, if they are to remain schools.

Birmingham Civic Society.

We must join in the expressions of regret that the efforts of the Birmingham Civic Society to secure the preservation of the Northfield Rectory have proved unavailing, and it is curious that the decision to demolish it has been arrived at through the agency of those who sought the aid of the Society to preserve it. It was held by a small majority for the rebuilding (13 to 11) that there was insufficient guarantee from the Society for the sound ess of the restoration. It is also said the rector preferred a new rectory. Thus the Civic Society places on record its opinion that the objections raised against retention were not insurmountable and that the removal of this old building will be a very grave loss to the amenities of Northfield.

Coulsdon and Purley U.D.C. Offices: A Corridor.

The Motor Show.

Most of the Press comments upon the recent motor show have been written more or less in the same strain. They see a nation liberated from the restriction of the railway that gave us mobility only from one centre to another. We are now free to roam at will, in by-ways as well as highways. The city clerk is now able to live in the country, and the labourer and his family, who had hitherto spent a lifetime in one hamlet, have been brought into touch with a wider world.

Beauty and the Car.

But is all this undiluted joy? "All the world's a road, and all the men and women merely drivers." There is a profound truth in this observation—we are merely drivers. We roam at will in by-ways and promptly proceed to destroy them. We protest, and fill columns of the Press day by day with suggestions for saving the countryside and, incidentally, for saving us from ourselves. But the lure of the perfect internal combustion engine is stronger than our love of the country, or any beauty, and we merely humbug ourselves when we pretend that these things are as important as an extra 50 miles an hour in speed. The various societies for the preservation of the countryside do undoubtedly save something from the wreckage, but there is a limit to the extent of motoring for many people, without a guarantee that there is some country worth seeing.

The Anomaly.

Many references have been made to the curious fact that trade depression and unemployment do not appear to affect the demand for motor cars. We are inclined to think that many sacrifices are being made. Domestic architecture—particularly of our smaller houses—has given us many examples during the last few years that their owners have definitely taken up the attitude that anything is good enough for the purpose. But, at all events, we have the curious anomaly of a prosperous industry which is going ahead and providing work in a workless world, on which we would suppose there was no money for spending upon luxury.

Coulsdon and Purley U.D.C. Offices: A Corridor.

GENERAL NEWS

Appointments as District Surveyors.

The Building Acts Committee of the L.C.C. has recommended that Messrs. E. J. Fisher, A.M.I.Struct.E., Mr. Alfred Lane, P.A.S.I., and Mr. A. L. Handley, B.Sc., A.M.I.C.E., be appointed district surveyors to the districts of Deptford, Battersea and Woolwich North respectively.

New Deputy Lieutenant for London.

The "London Gazette" states that Major Robert Inigo Tasker has been appointed a Deputy Lieutenant for the County of London. Major Tasker, who has been a member of the London County Council since 1910, was appointed chairman of the Council in March.

Architects' Estates.

Mr. Charles Russell Peacock, F.R.I.B.A., of Misgrove, Langland, Mumbles, Swansea (net personalty £2,135) left £2,327.

Mr. Reginald Bruce, A.R.I.B.A., P.A.S.I., M.Inst.M.E., M.I.C.E. (47), of Parksyde, Alderley-road, Wilmslow, Cheshire, town planning expert (net personalty £995) left £2,250.

The Housing Subsidy: Test Case.

It is learnt that Torquay house owners are to bring a test case in the High Court on the question of the legality of builders taking the housing subsidy. A sum of money has been collected by a committee specially set up for the purpose, and a writ has been issued. The main point at issue is whether the subsidy is reflected in the value of the houses.

The Harrow Hospital.

The new nurses' quarters at Harrow Hospital, which were recently opened, are the prelude to the erection of new departments which will make this former cottage hospital one of the best equipped therapeutical centres of the country. The sum of £50,000 is required to meet the cost of building, etc.

The Late Thomas Munro.

The death has taken place in Edinburgh, of Mr. Thomas Munro, a well-known architect in the North of Scotland, who had been in practice in Inverness for over thirty years. Born in Easter Ross, he went to the capital of the Highlands, and very soon, by his architectural skill, built up a very extensive business. He took a leading part with reference to the restoration of the graves of the Highlanders and the memorials at Culloden battlefield.

The Institution of Electrical Engineers.

The Scottish Centre of this Institution, in announcing that the annual dinner (tickets, price 16s., from the Hon. Secretary, 74, Waterloo-street, Glasgow, C.2) will be held on Nov. 18, directs the attention of its members to the library facilities open to them at the Reference and Lending Library at the Royal Technical College. The catalogue is obtainable from the Librarian, price 1s., and the issue of books by post should enable all members to participate.

St. George's Chapel, Windsor.

We give as our frontispiece this week an interior view of St. George's Chapel, Windsor, which, after being under repair during the past ten years, was reopened this week by His Majesty the King. The work has been carried out under the direction of Mr. Harold Brakspear, F.S.A., A.R.I.B.A., with Sir Giles Scott, R.A., nominated by the Royal Academy, as honorary consulting architect. Messrs. Thompson, of Peterborough, were the contractors, and Mr. Hopkins the foreman in charge throughout the ten years. Mr. R. B. Robertson, the Chapter surveyor, acted as clerk of works. The cost of the work has been £200,000.

Reinstatement of the Shaftesbury Memorial.

The following is taken from the Westminster City Council agenda:—"We have again had before us a memorandum prepared by Mr. John Murray in 1928 of his proposals for the re-erection of the Memorial Fountain. This provides for a grass lawn surround and for the water supply to be at the full strength originally intended, but which was years ago modified owing to the water being blown by the wind beyond the limits of the Fountain. We consider that it is doubtful whether a grass surround could be maintained in good condition, and that the exigencies of the situation and the circumstances generally render the adoption of Mr. Murray's plan undesirable. We propose to inform the London County Council accordingly." The fountain is the Shaftesbury Memorial, Piccadilly Circus.

COMPETITION NEWS

Proposed New Offices, Bedworth.

Careful consideration has been given to the need for new offices, states the report of the Finance and General Purposes Committee of the Bedworth U.D.C., who recommended that architects in the district be invited to submit competitive designs for the erection of new offices at a cost of between £4,000 and £5,000 upon a site the Welfare Committee be invited to provide. It was further recommended that a scheme be prepared forthwith for submission to the Unemployment Grants Committee, with a view to obtaining a maximum grant. It was moved that the question be referred back, and this course was agreed upon.

Ramsey Grammar School Competition.

The assessor in this competition, Mr. T. Taliesin Rees, F.R.I.B.A., has made his award as follows:—First (£250), Messrs. Charles B. Pearson, F.R.I.B.A., Son & Duffy, Dalton-square, Lancaster; second (£150), Messrs. Gray & Evans & Crossley, 51, North John-street, Liverpool; third (£75), Messrs. C. F. Bates, A.R.I.B.A., and Colin Jones, L.R.I.B.A., 78, Bridge-street, Newport, Monmouthshire.

CORRESPONDENCE

The Octopus.

SIR,—We hear so much of "steps being taken" by various societies to preserve amenities and to regain some kind of dignity in villa and bungalow, and many of us must have wondered how we could help as individuals. I suggest that much could be done by individual architects in connection with circulars and advertisements. We often see some such caption as "The architect affirms that only by using Xistunk can . . ." The architect is depicted earnestly pointing at Xistunk as applied to a building that ought to find its place as a *mauvais exemple* in a cautionary guide. We are inundated with literature on proprietary articles too often badly designed in themselves or affixed to perfectly shocking buildings.

My proposal is that architects should take the trouble to expostulate with the firms guilty of such crimes against architecture. These firms are run by business men who would be too astute to continue to circularise material that apparently did not meet with the approval of potential customers. This type of circular and advertisement does a great deal of harm since it confirms in print (and hence infallibly) the speculative builder's views of what a really snug villa or bungalow ought to look like. One or two polite expostulations would, of course, be brushed aside as emanating from crankiness or insanity, but a few dozen of them would make our business friends scratch their heads and wonder what was wrong with their pretty buildings. It might even occur to them to employ someone who knew something of his subject to prepare the designs.

MANNING ROBERTSON.

The Founder of Garden Cities.

Mr. Cecil Harmsworth has unveiled, at Letchworth, a stone of remembrance to the late Sir Ebenezer Howard, the founder of the town and the pioneer of the Garden City movement. The stone is simple in design, and is set up in the children's park which bears the name of Howard, near the hall built in memory of Sir Ebenezer's first wife. It is similar to one recently set up at Welwyn Garden City, of which Howard was also the founder.

Coulsdon and Purley U.D.C. Offices: Crush Hall, First Floor.

ROYAL INSTITUTE OF BRITISH ARCHITECTS

INAUGURAL ADDRESS.

On Monday evening, at 9, Conduit-street, the President, Sir Banister Fletcher, F.S.A., delivered his inaugural address to the R.I.B.A. In his previous inaugural address, said the President, he alluded to six Past Presidents who were still with them. It was a great personal grief to him to have to record the passing away of Sir Aston Webb. He (the affection and esteem of all architects. His life, since the days when he presided at the class of design at the Architectural Association, and it was difficult for him to realise that Sir Aston was no longer with them. His influence was great, and he held the affection and esteem of all architects. His work lived on, and it only remained for him that evening to add his tribute of affection, admiration and gratitude.

He proposed to refer briefly to some of the outstanding architectural events which had taken place since he last addressed them.

The Development Scheme.—A year ago certain difficulties were delaying the adoption of the "Development" Scheme. Those difficulties, as they knew, had now been removed. The opposition of other bodies was unsuccessful, and they had received the sanction of the Privy Council to their new by-laws. It remained now for them, in conjunction with their allied societies, to make the scheme a complete success. He was glad to be able to tell them that applications for admission to the Royal Institute were coming in steadily, and that the councils of the allied societies were giving them invaluable assistance in reporting upon the candidates from their districts. When the enrolment was complete they hoped to see an almost entire unity between the membership of the R.I.B.A. and that of the allied societies, as well as a large admission of qualified architects, at present unattached, either to the R.I.B.A. or to the allied societies. They looked to every member to help in this work.

The Registration of Architects.—The beginning of the new Session of Parliament marked the next stage in the campaign of their Registration Committee. In the last three years they had made very definite progress towards the realisation of their aims. When the Registration Bill was drafted, it was never expected that it would pass easily or quickly, chiefly because of the difficulty of securing enough Parliamentary time for a private Bill in an overcrowded Session. The history of architectural registration in other countries, as well as the records of other professions which had tried to obtain registration, showed that it would require years of patient persistence. So far from having had a disappointing history, their Registration Bill had been remarkably favoured. In little more than three years the Bill had scored tangible successes, for it had had a second reading in the House of Commons; a favourable verdict from a Select Committee; passed through all its stages in the House of Lords, and secured a certain measure of Government support, while the opposition to it in the House of Commons had greatly weakened. If they could count, as he was informed they could, upon the continued loyal support of their members and of their allied societies, they had every reason to reckon on success at an early date. This approach towards registration marked a new stage in their history, and their prospective new premises marked yet another stage.

The New Premises.—If all went well they would be holding their inaugural meeting in November, 1934, in their new headquarters in Portland-place. The Premises Committee and the Jury of Assessors, whose names had been received, he believed, with a remarkable expression of approval from the profession, were now busy upon the conditions of the competition. He wanted to stress emphatically the great importance of this unique competition, which was to decide to whom should be confided the designing of their own particular and representative building. "Make no mistake as to the significance of this open competition," said the speaker. They were about to erect not merely a London or a national building, but an Imperial building for architects from all parts of the British Empire, and they looked to their brother architects of the R.I.B.A. to send in designs from which they could select a home of architecture, which for suitability of plan, dignity of design, and nobility of aspect should be the admiration of the world.

The Scale of Charges.—They had now another change in hand, and that was the consideration of the scale of charges. The draft of the revised scale had aroused a great deal of interest among members. Many suggestions had been received, and they were now being weighed by the Special Committee. In due course the Council's decision would be announced. In this connection he would ask members generally to realise that it was not humanly possible to satisfy all opinions on a subject of this kind, which closely touched the material interests of architects. Every conceivable opinion had its supporters and its opponents. They had to decide in each case where the balance of advantage lay, and he knew he could appeal with confidence to those whose views were not ultimately accepted to take the decision like good sportsmen.

Conditions of Contract.—He could not give them any official information as to the progress of negotiations upon the conditions of contract. But they were deeply indebted to the Practice Committee and its Chairman, Mr. Sydney Tatchell, for the good work that they had recently been doing, and they entertained a lively hope that within the next few months a settlement satisfactory to all parties affected would have been attained.

Official Architecture.—Next they came to the somewhat controversial subject of official architecture. As he indicated in his address last year, this matter had occupied, and was occupying, the serious attention of the Council. They were definitely of opinion that the time had come for an unprejudiced and careful inquiry into the whole subject, and they were pressing that view upon His Majesty's Government. They believed that such an inquiry would give them the true facts of the situation, and enable them to decide in which direction lay the true interests of the art of architecture, for that stood now, as always, as their principal object and purpose.

Architectural Education.—Under the wise and quiet guidance of their friend, Mr. Sylvester Sullivan, the Board of Architectural Education and its representative committees were steadily carrying on this essential work. A process of levelling up, he continued, was undoubtedly going on all over the country, and, while the older and more famous schools maintained their position, a host of young and enthusiastic teachers were holding up the torch of architecture in scores of places of education throughout the land. The process was far from complete, but they could say confidently that the opportunities for acquiring a knowledge of their art were now far greater and more easily attainable than at any previous time.

The Greater London Regional Planning Committee.—There was a notable new movement in which architectural interests were involved, and that was the work of regional planning. The Greater London Regional Planning Committee had issued its first report, which had been well received. Dr. Raymond Unwin, their expert adviser, had called special attention in this report to the need for applying the art of design to the planning of large regional areas, as well as to the replanning of the older parts of their towns. Emphasis was also laid on some of the fundamental bases of such planning, and on the necessity for securing modifications in the existing planning powers and authorities. These changes were required to make regional planning effective, to make it possible to design urban development with adequate open spaces, to check sporadic building, which was ruining so much of the beauty of the countryside, and to prevent unsuitable ribbon development, which was as injurious to the traffic-bearing capacity of our main roads as it was destructive of their amenity.

The report suggested that a Joint Planning Committee for Greater London should be constituted, not merely in an advisory capacity, as was the present Committee, but endowed with power to secure effective regional planning. The Committee were dismayed at the extent to which unregulated building was breaking out in all directions, absorbing open lands of great beauty, which were vitally needed if the inhabitants of London were to have any reasonable opportunity for open-air recreation so necessary for health, and even for the development of character. The Committee were specially concerned to secure such amendments in the present planning powers as would enable a proper proportion to be maintained in future between urban development and the open lands required for the welfare of those dwelling in the developed areas. The present Minister of Health had stated definitely his intention to introduce the necessary Bill at the earliest opportunity. It was clear that here was a subject on which there was substantial agreement, and it was for the interested authorities and the public to impress upon Parliament that the matter was of such urgency that Parliamentary time must be found for it. In the meantime, the Committee were continuing their preparatory work, studying how to secure a better co-ordination between industrial and residential development, how to preserve adequate open space, and how to provide for the rapidly changing character and increasing volume of traffic of all kinds.

The Building Trades Exhibition.—The Building Trades Exhibition, held at Olympia, must have been of great interest not only to the profession, but also to the general public, and their congratulations were due to their old friend and Hon. Associate, Mr. H. Greville Montgomery, for the successful way in which the exhibition was conducted.

St. Paul's Cathedral.—One of the outstanding events of the year was the triumphant completion of the great undertaking which had occupied over 17 years for safeguarding the fabric of St. Paul's Cathedral. The speaker then referred to the special general meeting held at the R.I.B.A. to commemorate the event and proceeded: The repairs now having been carried out to the superstructure, it remained to make sure that the foundations were never interfered with, and for this purpose the Corporation of the City of London were considering the possibility of obtaining legal powers by which they could impose certain necessary restrictions on the erection of buildings with deep basements in the neighbourhood of St. Paul's.

Charing Cross Bridge.—A year ago he was afraid it fell to his lot as President to fire what was perhaps the first shot in the friendly battle that had to be waged over the great Charing Cross improvement scheme, which was embodied in a Bill and introduced into the House of Commons. For, as he pointed out then, it was not only, and it was not mainly, a question of a bridge. It was a question of the right planning of great areas of vast importance on both sides of the river. It was a matter of legitimate satisfaction to them that Parliament confirmed their view, and that the problem was now being reconsidered by an advisory committee, under the able chairmanship of Sir Leslie Scott. This afforded ample justification for the critical attitude which the Royal Institute took up with the other bodies associated with them on the Thames Bridges Conference.

Not without considerable misgivings as to the possibility of securing a satisfactory scheme in the absence of any general plan for the development of Central London, the R.I.B.A. agreed, together with the Institution of Civil Engineers, the Surveyors' Institution, the Royal Academy, the Royal Fine Art Commission, and the Town Planning Institute, to nominate members to represent their point of view on that Advisory Committee, and to serve with other members appointed by the local authorities and other interested parties. The problem was now in the hands of that Advisory Committee, and at the present stage he could only say that they had their best wishes for a successful solution of the difficult problem. That solution must be rendered more difficult because no carefully thought out policy and plan for the development, or redevelopment, of London had been available with which the various proposals could be compared.

It was strange that London should lag so far behind many other great cities in having prepared no plan for its future. It was still more remarkable that those most responsible for its administration seemed to have so little realisation of the value and use of such a well-considered plan. They were all looking forward with some anxiety, but also with earnest hope, to the production of a scheme which would be worthy of the greatest opportunity that had come to the planners of London since the Great Fire. They refused to believe that the lesson of the vast blunder and missed opportunity of 1666 would be lost upon the responsible authorities of the present day.

New By-laws of the L.C.C. and London Building Act, 1930.—In July the R.I.B.A. called a conference of the various bodies dealing with the revision of the Building Acts and Regulations, and it was decided to consolidate the reports which they had prepared to be sent in to the Government as recommendations for a new building code. On July 31 a deputation attended at the Houses of Parliament, and was received by the Minister of Health and Miss Lawrence, and laid a synopsis of these recommendations before them, which was supported by speakers representing the various interests forming the conference. The deputation was very sympathetically received by the Minister, Mr. Greenwood, and he promised to give the recommendations careful consideration and to see the London County Council with regard to their new Bill. One of the suggestions was that a Technical and Economic Advisory Council should be formed, which would report to the Ministry of Health as to bringing the building by-laws and regulations up to date. Invitations had been sent to the various institutions connected with the building industry to nominate representatives on that Advisory Council.

Having referred to the recently issued Joint Conference interim report on the height of buildings (published in our issue for August 1, 1930), the President proceeded to deal with :

Competitions.—Many important architectural competitions, he said, had been settled during the past year, and, as they knew, he was strongly in favour of that means of obtaining designs, especially as it gave the younger members of the profession a chance of expressing their ideas in definite designs, and possibly in material form as buildings. They had only to look at recent buildings erected by that method to realise that some of the younger men in the profession were able to produce and carry out designs which would compare favourably with any previous period of their art.

The President then gave a list of the outstanding competitions during the year, with the successful competitors.

Buildings of the Year.—He felt they could lay claim that the buildings of the past year had shown that architects were never better qualified to plan and carry out complicated building schemes than at the present time, and this was due to the careful training in their schools and to the study which was given to the important art of planning for different purposes. Fine buildings of all kinds had been erected in London. He could not remember a time when there was so much building activity as at present, when various quarters of the town were being changed from residential into business premises and the same thing was happening throughout the country.

Conclusion.—They must not, concluded the President, omit allusion to the higher aspect of architecture, which, though it had its origin in the material human need for shelter, and thus differed from other arts, had nevertheless developed as an art which had kept pace with the growing æsthetic sense of mankind. Primitive man was first conscious of the physical needs in his life on this earth, and so he built, and when man developed the æsthetic sense the art of architecture was born. Certain proportions in building were recognised; the conditions imposed by materials were conformed to; climate determined the various features; and, above all, the purpose was enthroned as the governing power in building.

One period in architectural style succeeded another, and tradition held its own in all the various developments, with an occasional outbreak and protest against what was at times declared to be the tyranny of tradition. Such interludes occurred when the Baroque style was started in Italy as an assertion of architectural freedom; when the Battle of the Styles broke out in England, when "L'Art Nouveau" started in France, and now again in our own day, when a fresh desire for simplicity, which was largely the outcome of the need for economy, had too often resulted in buildings bereft of feature and barren in style. In fact, there were not wanting signs of a tendency to the "uncouth" which was far from the beauty of simplicity. A false striving after simplicity in architectural design had given us notable examples of extensive and prison-like walls and windows. But through many experiments and many ephemeral efforts all that was good in architectural tradition would come to its own again. Every architect should remember that streets and roadways were our common property, and he should respect their human amenities, and not erect a building resembling the Mappin Terraces, suitable for tigers at the Zoo, or something so ultra-modern that it quarrelled violently with its quiet and elderly neighbours. We were told that London was packed with mistakes; some monumental mistakes had, at any rate, made architectural history, but small mistakes oft repeated simply made muddles. Suitability to surroundings was still a limiting factor in design, and must have due consideration if we were not to add confusion worse confounded in the present to the mistakes of the past. It was still possible to be up to date without giving offence to the architecture of tradition. It was difficult to see what the trend of design in the present day might bring forth in a few years' time, but meanwhile they must be thankful that much extraneous, superfluous and unmeaning ornament and decoration had been ruthlessly suppressed.

Their work as architects was all-embracing, and they must adapt themselves to meet modern needs. They knew the manifold and various qualities and capacities which went to the making of an architect. He need not enumerate them, but would just say that he must be at one and the same time an artist, a business man, and even a man of the world, a combination which suggested a superman! He wondered whether they always realised that architecture held a unique position among the arts in the daily life of all civilised people, and so the responsibility as well as the opportunity of the architect was also unique among creative artists?

It was possible for people to lead their daily lives and to follow their occupations without the solace of music, without the chance of gazing on the beauty of the painted picture, without being transported by poetic fancies, and without reading the masterpieces of literature. It was also possible, though difficult, he admitted, to avoid even the daily Press, the wireless and the cinemas, which were all derivatives, he supposed, of some form of art, but it was not within the power of any man who lived in a civilised society to shut himself off from the sight of some form of architecture, good, bad, or indifferent. People could not escape from architects; their work lined the streets, it appeared in private and public buildings, and this it was that threw upon them the great responsibility of giving people something beautiful, something uplifting, something that by its beauty called to or even awoke the latent æsthetic sense even in the passing crowd. That was the work that had been given to them as architects to carry out for their fellow men. They followed a high calling as creative artists, and it behoved them to answer the call of great opportunities and to hold always before their vision the aim of providing beautiful architecture, and of giving added happiness in the ordinary life of their people by surrounding them with beauty in line and design. If architects offered them the beautiful, people would learn to appreciate it, and even demand it, in city and country alike, but it was for architects to raise the standard of design and to set an example of what was fitting, appropriate, and beautiful in buildings. It was for the purpose of upholding those high ideals that the R.I.B.A. first received from King William IV its Royal Charter, which had since been renewed by every successive Sovereign, until now their extended sphere of operations, which had just been sanctioned by the Privy Council, to which he had already referred, threw upon the Royal Institute an ever increasing responsibility for the future advancement of Architecture, the Mother of the Arts.

Ralph Knott Scholarship.—At the close of his address, the President announced that a number of friends of the late Mr. Ralph Knott had decided to found a scholarship in his memory, and had collected a sum of more than £1,000 for this purpose.

Discussion.

Dr. Scott Lidgett, Vice-Chancellor of London University, proposing a vote of thanks to the President, complimented him upon his able and informative address. Some were beginning to wonder, he continued, whether the Institute was not taking up the question of regional planning too late, and whether the time was not past for the effective town planning of the great, haphazard city to which we were all so proud to belong.

Sir John Simpson, seconding the motion, added his congratulations upon "a truly admirable address—business-like, well put together, and inspired by a touch of poetry." He liked especially, he continued, the conclusion when, after dealing with practical, matter-of-fact affairs, the President asserted that architects were as naught unless they were artists. It was very pleasant, after reading in the daily papers that everything was wrong, to come and hear that the R.I.B.A. was going steadily on doing serious work in a courageous way and not complaining.

The motion was then put to the meeting, and carried with acclamation.

The Royal Gold Medal.

The President, after briefly replying, announced that Sir Edwin Cooper, A.R.A., had been nominated as a fit recipient of the Royal Gold Medal, 1931. He then drew attention to an exhibition on the walls of photographs of some of Wren's original drawings for architectural schemes and projects, including Whitehall, Windsor Castle and Greenwich Hospital. The drawings had been discovered in All Souls Library by Mr. Arthur T. Bolton, by whose courtesy the photographs were exhibited.

A Clerk of Works' Estate.

Mr. John Gilbert Satchell, of Lanscombe, Hillmorton-road, Rugby, building clerk of works, left £12,300 (net personalty £496).

ILLUSTRATIONS

PLATES.

Girton College, Cambridge.

The first buildings on the present site of this College were started in 1873 from the designs of the late Alfred Waterhouse, R.A., and the College has been gradually enlarged and added to since that date by him and the late Paul Waterhouse, P.P.R.I.B.A., until the College now accommodates 180 students. Since the War further extension has become necessary in order to house a larger number of students and to provide more suitable accommodation for lecture rooms and staff. The extensions now contemplated have been designed by Mr. Michael Waterhouse, A.R.I.B.A., with Sir Giles G. Scott, R.A., as consultant. They consist of a wing for thirty students to complete the Woodlands Court on the east side, and a library, balancing the chapel on the south side of this court, with a connecting single-story cloister containing lecture rooms. The provision of a new library, which is the generous gift of an anonymous donor, sets free the old hall, at present used as a library, as a lecture room. The accommodation for students consists of fellows' dining-room and drawing-room, planned in conjunction with extensions to the kitchens and maids' quarters, and changing rooms for visiting teams, the whole forming a new small garden court to the north-east of the dining hall. The remainder of the new building consists of minor alterations for the convenience of the staff and guests in various parts of the College. Generally, the new wing is a three-story structure with fireproof floors. The material proposed for this wing and the new work generally is 2 in. sand-faced bricks, stone dressings and tiled roofs. The library consists of a low stack room on the ground floor and a reading room on the first floor with an open timber roof carried out in oak.

Coulsdon and Purley Council Offices.

The pervading effect of the new buildings for the Purley and Coulsdon Urban Council is one of simplicity and refinement. In choice of materials and colour treatment the general result is very pleasing. The entrance is marked by a low flight of steps and it is enclosed within a pillared portico rising to the full height of the front. The columns and pediment are of stone, the main walls being of red brick and the roofs of red tiles. A good feature of the plan is seen in the ample entrance hall, from which the main flight of stairs ascends, and opposite the entrance a pleasing feature is a fountain court with a green grass surround to the circular pond in the centre. The furnishing and equipment of the whole building are evidence of care and taste. Considering the wide area and importance of the district served by the Council, the whole expenditure incurred appears to be decidedly moderate. The entrance hall, 29 ft. by 23 ft., is paved with San Stefano marble tiles and has the walls divided by pilasters into bays with circular arches on all four sides. The main staircase, on the right of the entrance hall, is constructed in three easy square flights and leads to the crush hall on the first floor. At private meetings of the Council the door leading from the entrance hall can be locked, thus isolating the Council suite. The council chamber, approached from the crush hall, is 44 ft. by 27 ft. Its walls are panelled to a height of 12 ft. in wainscot oak, broken up by coupled Ionic pilasters of the same material. The waggon ceiling has panels of richly moulded plaster work. The committee rooms are placed at the ends of the council chamber and communicate with it by means of large sliding doors which form part of the panelling.

The principal departmental offices, which are placed *en suite*, are on the ground floor. They are arranged on three sides of a rectangular garden court and are all approached by one continuous corridor around the court, both ends of which are connected to the entrance hall. This arrangement provides for easy intercommunication between all departments. Connecting corridors are provided to allow for future extensions to be carried out without disturbing the present building. Additional offices, stores, strong rooms, heating chamber and canteen are provided on the lower ground floor. If and when necessary the present building can be enlarged by symmetrical extensions to the west of the new offices. The architects, who gained the work in open competition, are Messrs. W. B. Nicholls and Basil Hughes, A.R.I.B.A.

The general contractors were Messrs. H. Bacon and Son, Ltd., and the following were sub-contractors: Associated Asphalt Co., Ltd., asphalt; Thomas Lawrence and Sons, Ltd., facing bricks; Patent Victoria Stone Co., Ltd., cast stone; Edward Wood and Co., Ltd., structural steel; J. A. King and Co., Ltd., hollow floor tiles; Siegwart Fireproof Floor Co., Ltd., fireproof construction; Ames and Finnis, tiles; Hollis Bros. and Co., Ltd., oak flooring and teak block flooring; United Waterproofers, Ltd., waterproofing materials; Norris Warming Co., Ltd., central heating; G. Matthews, Ltd., stoves; Croydon Gas Co., gasfitting; County of London Electric Supply Co., Ltd., electric wiring and electric heating; Wm. Whitehouse and Co., Ltd., and L. Dornier and Hamlyn, Ltd., electric light fixtures; City Iron Co., sanitary fittings; Carter and Aynsley, Ltd., door and window furniture; Reliance Telephone Co., Ltd., telephones; Ratner Safe Co., Ltd., strong-room doors; Wenham and Fowler, iron railings and lamp standards; James Walker, decorative plaster; Thomas Elsley and Co., Ltd., metalwork; John P. White and Son, Ltd., panelling to council chamber; Anselm Odling and Sons, Ltd., marble; Carter and Co. (London), Ltd., tiling; John P. White and Sons, Ltd., benches for council chamber; B. Cohen and Sons, Ltd., chairs in council chamber and furniture for committee rooms.

The Plaza Cinema, Stockland Green, Birmingham.

Mr. A. L. Snow, A.R.I.B.A., Architect.

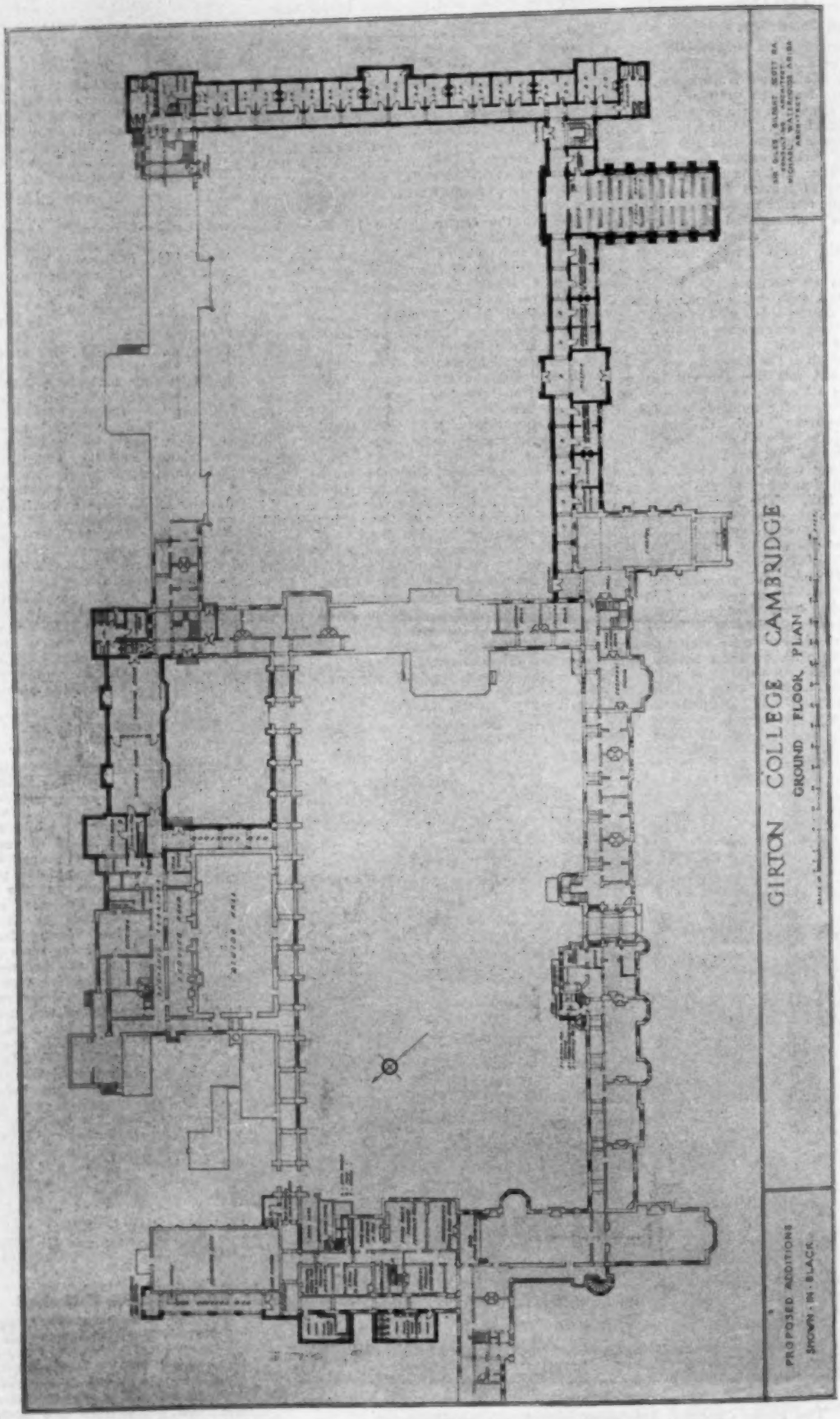
"Boffins," Fernhurst, Sussex.

This house has been recently erected from the design and under the superintendence of Sir Banister Fletcher, P.R.I.B.A. It is built partly of 11 in. cavity and partly of 9 in. solid walls rendered in white cement with a tarred plinth, while the entrance porch and dressings are of cast stone, the roof being covered with dark brown sand-faced tiles. A feature of the garden front is in the formation in the roof of a bird-cote intended for the smaller wild birds which abound in Sussex, while a verandah has been formed over the bays of the dining-room and music-room entered from the bedrooms on first floor, giving a commanding view of the surrounding country. The house was designed to the requirements of two musical ladies who desired a large room to accommodate a string quartet; and the dining-room adjoining has been provided with folding doors to give additional accommodation to the music-room when required. Three bedrooms, bathroom, and two large boxrooms are provided on the upper floor, the bedrooms being fitted with built-in wardrobes and lavatory basins. The sewage purification scheme was carried out by Messrs. Tuke and Bell, Ltd., the domestic and central heating by the "Aquaheat" Co., the steel windows and doors by Messrs. Crittall, Ltd., the cast stonework by Messrs. Baxter, Elliott, and the general building contractor was Mr. Frank Privett, of Haslemere.

Lodge, Rashleighs, Maidenhead.

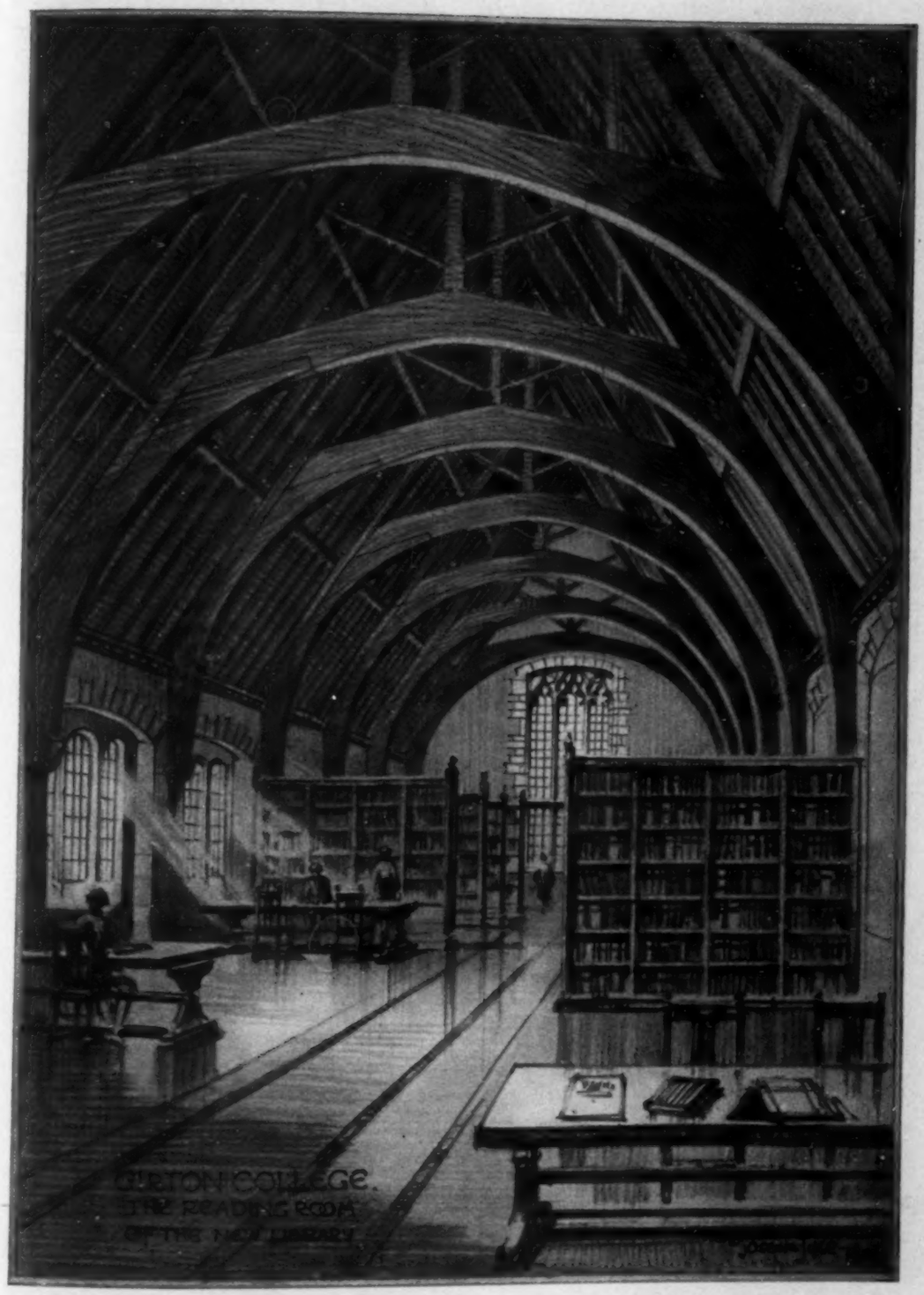
This lodge has been erected on the estate of Mr. William Johnson for his head gardener, adjacent to one of the drives from Maidenhead Thicket, the work having been carried out from the design and under the superintendence of Sir Banister Fletcher, P.R.I.B.A. It is built of 9 in. brick walls, having rough-cast on the lower portion, with

(*Continued on page 797*).



Proposed New East Wing and Library, Girton College, Cambridge.

Mr. Michael Waterhouse, A.R.I.B.A., Architect. Sir Giles Scott, R.A., Consulting Architect.



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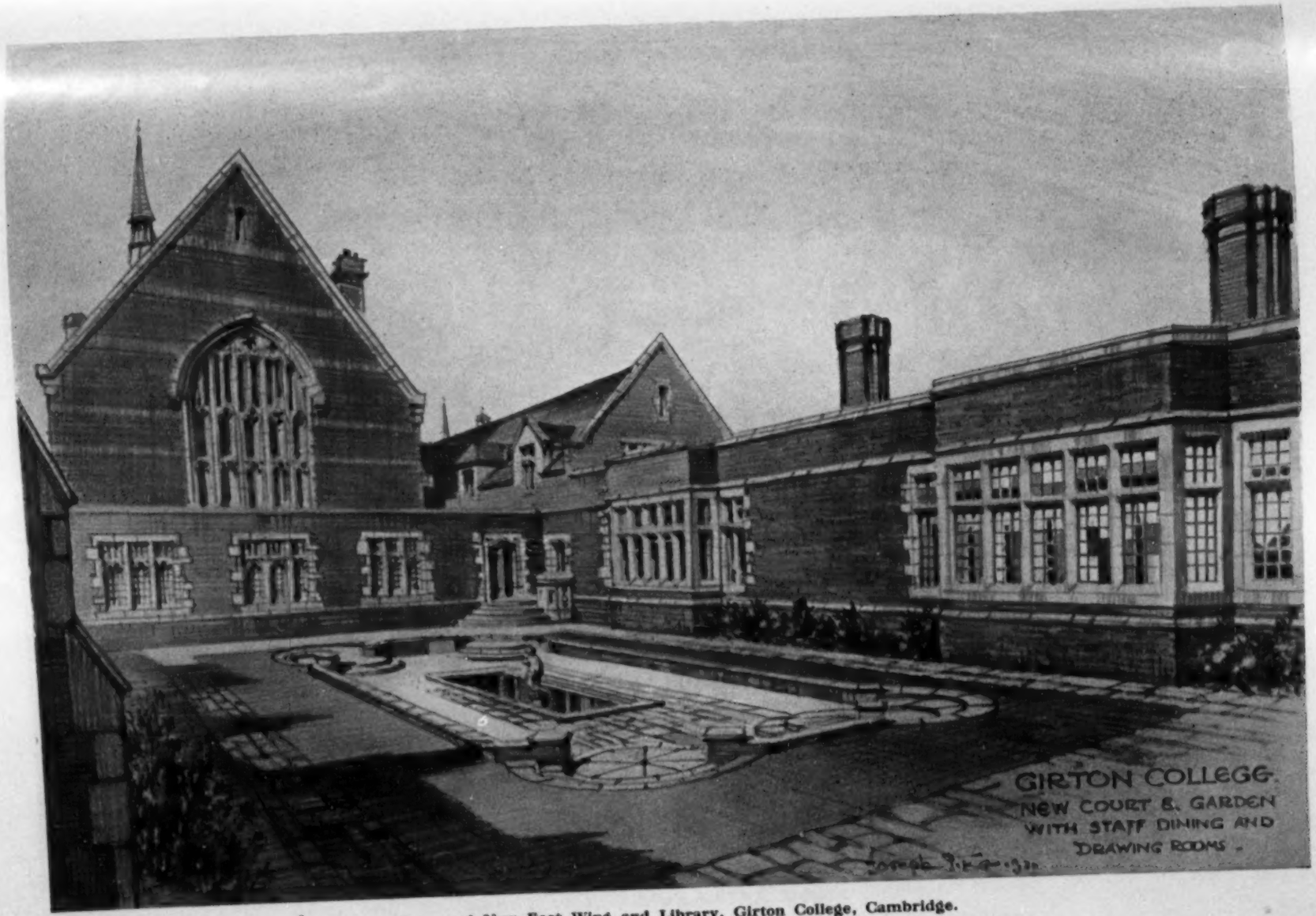

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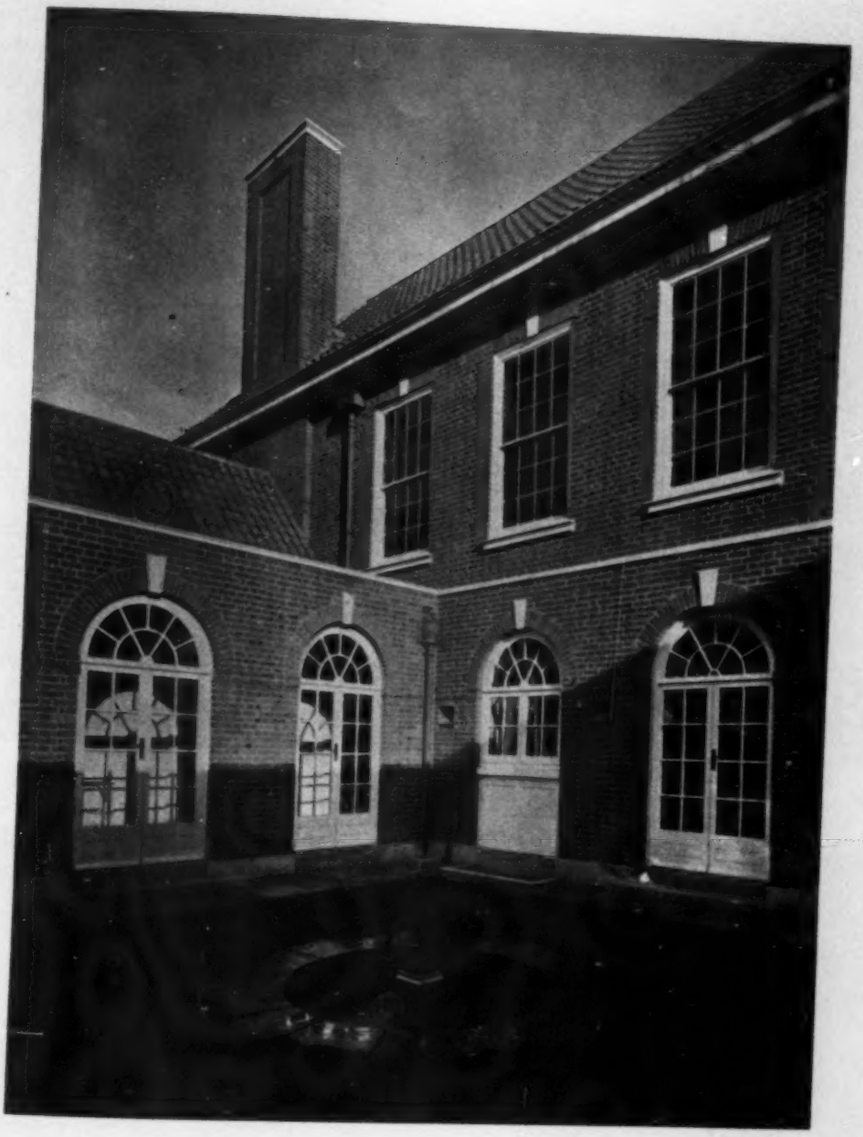
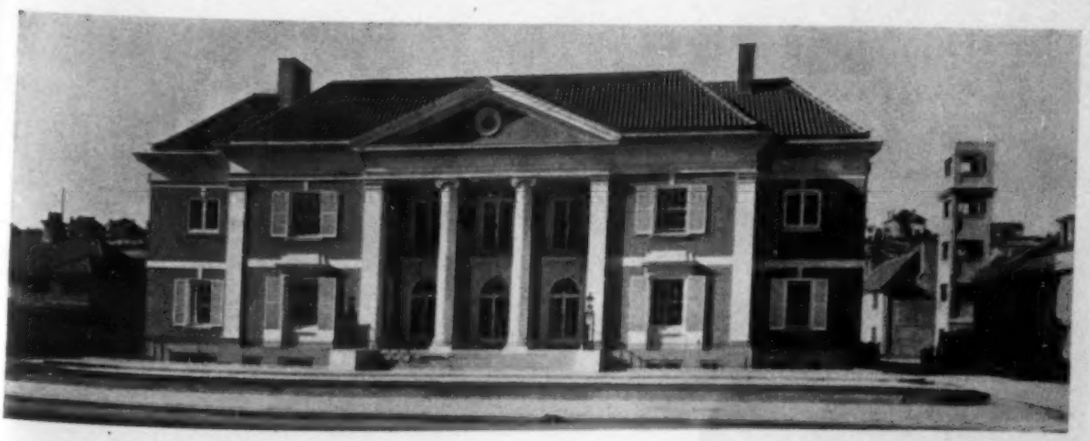
Coulsdon and Purley U.D.C. Offices: General View of Main Building and Fire Station.
Messrs. Nicholls and Hughes, A.R.I.B.A., Architects.



GARDEN COURT.

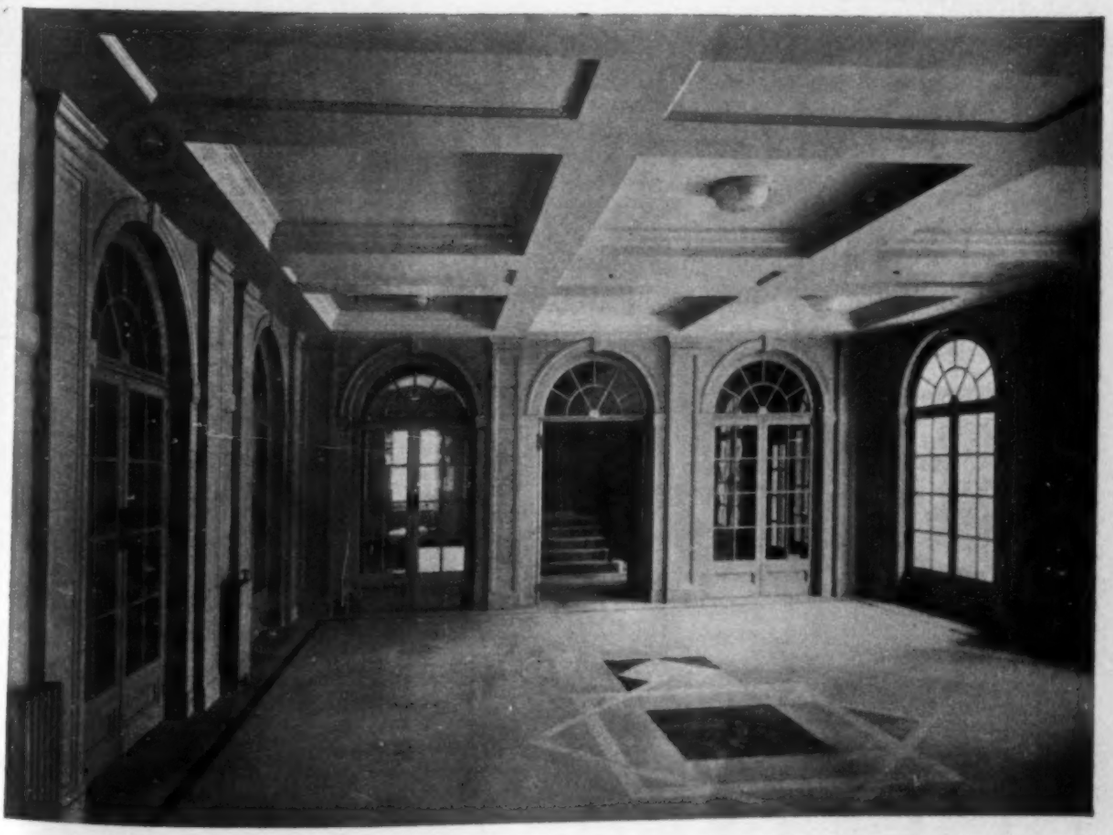


MAIN FRONTAGE.

Coulsdon and Purley U.D.C. Offices.

MESSRS. NICHOLLS AND HUGHES, A.R.I.B.A., Architects.

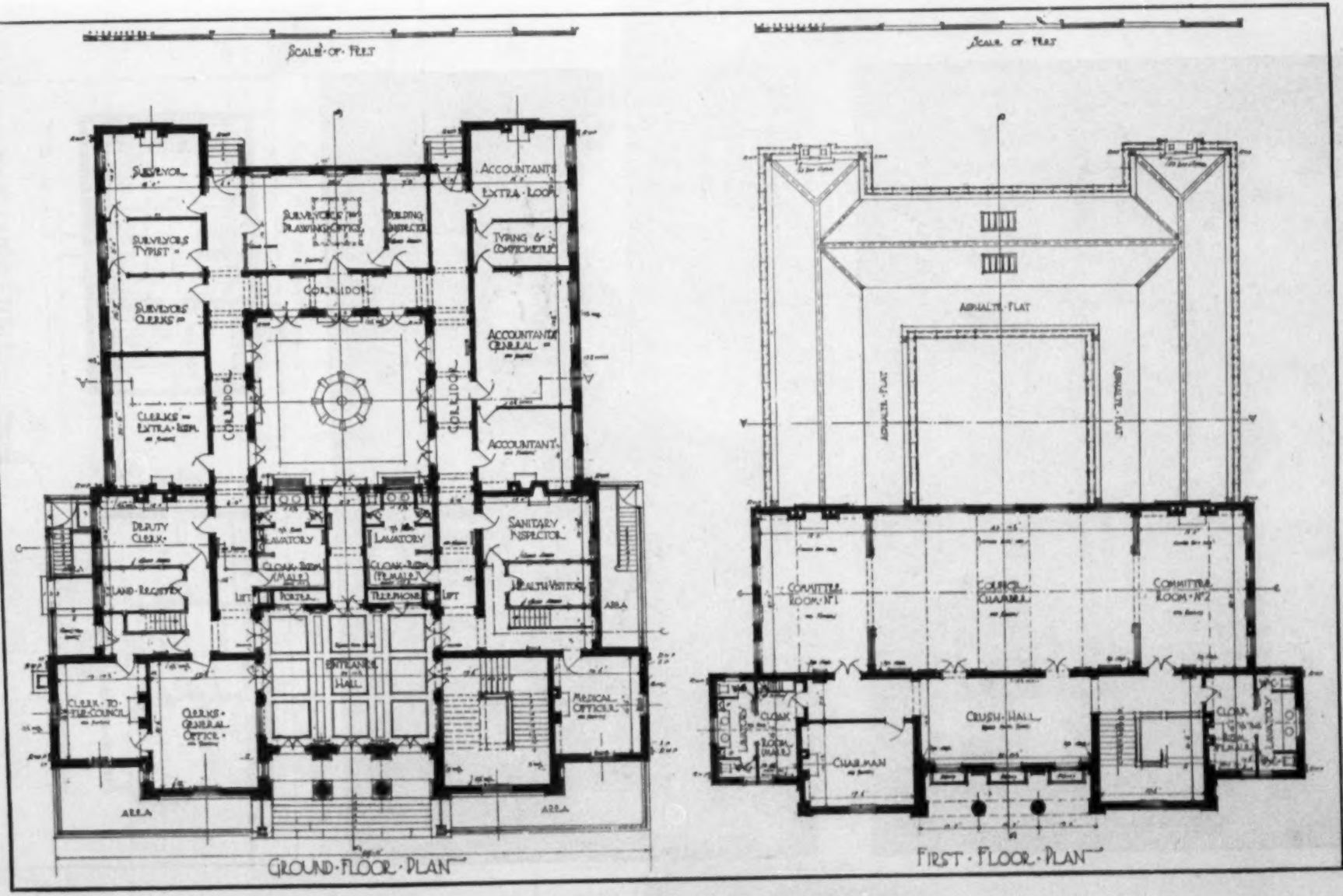
COUNCIL CHAMBER.



ENTRANCE HALL.

Coulsdon and Purley U.D.C. Offices.

MESSRS. NICHOLLS AND HUGHES, A.R.I.B.A., Architects.

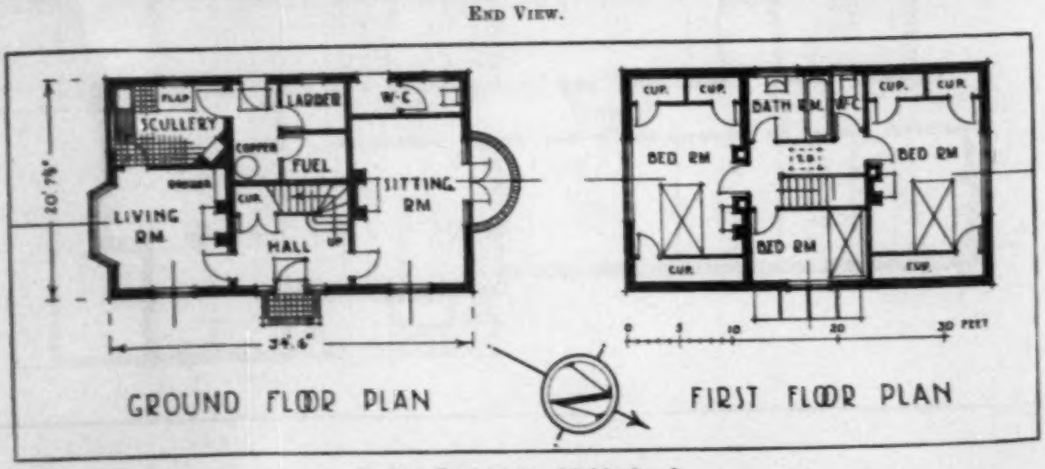


Coulsdon and Purley U.D.C. Offices.

MESSRS. NICHOLLS AND HUGHES, A.R.I.B.A., Architects.

Front View.

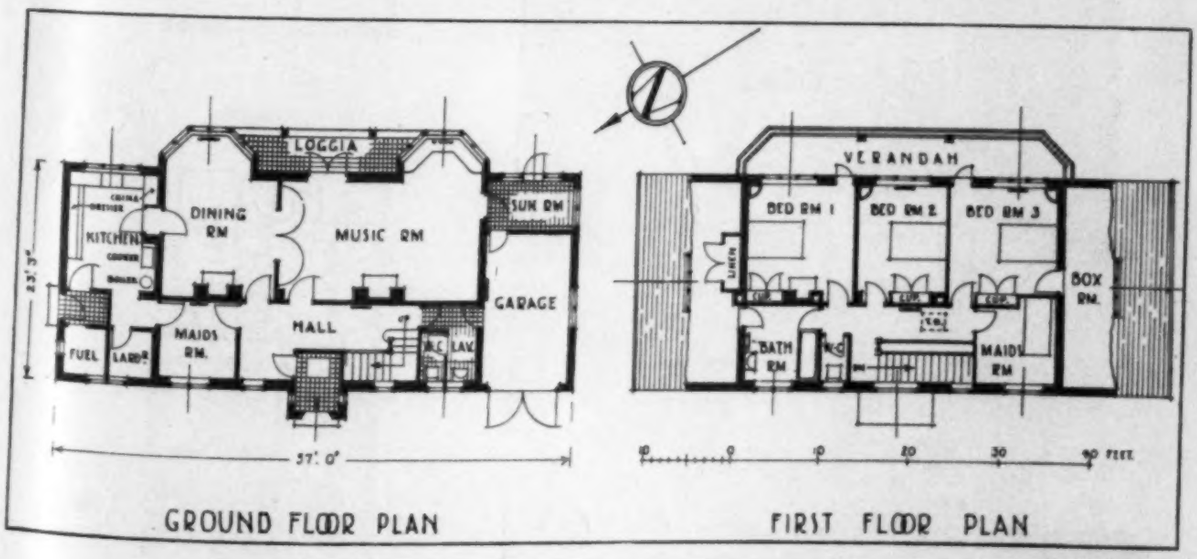
End View.



Lodge, Rashleighs, Maidenhead.

Sir Banister Fletcher, P.R.I.B.A., Architect.

GARDEN FRONT.

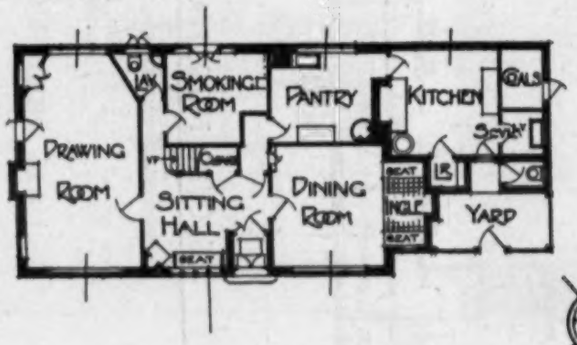


"Boffins," Fernhurst, Sussex.

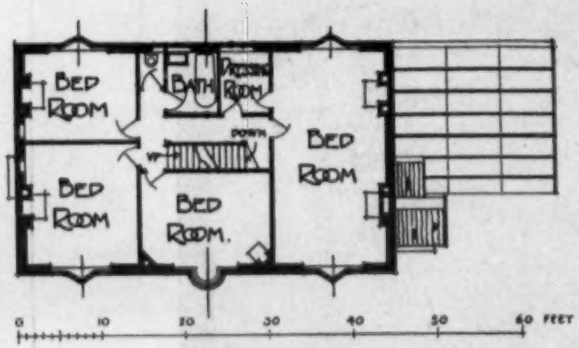
SIR BANISTER FLETCHER, P.R.I.B.A., Architect.

ENTRANCE FRONT.

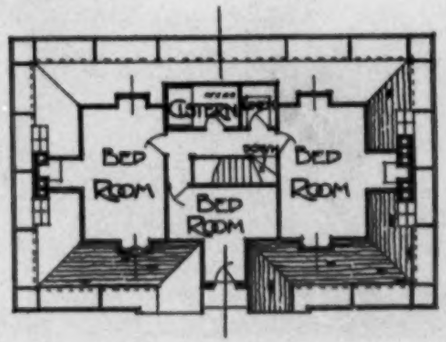
GARDEN FRONT.



GROUND FLOOR PLAN



FIRST FLOOR PLAN



SECOND FLOOR PLAN

"Tiverton," Potters Bar.

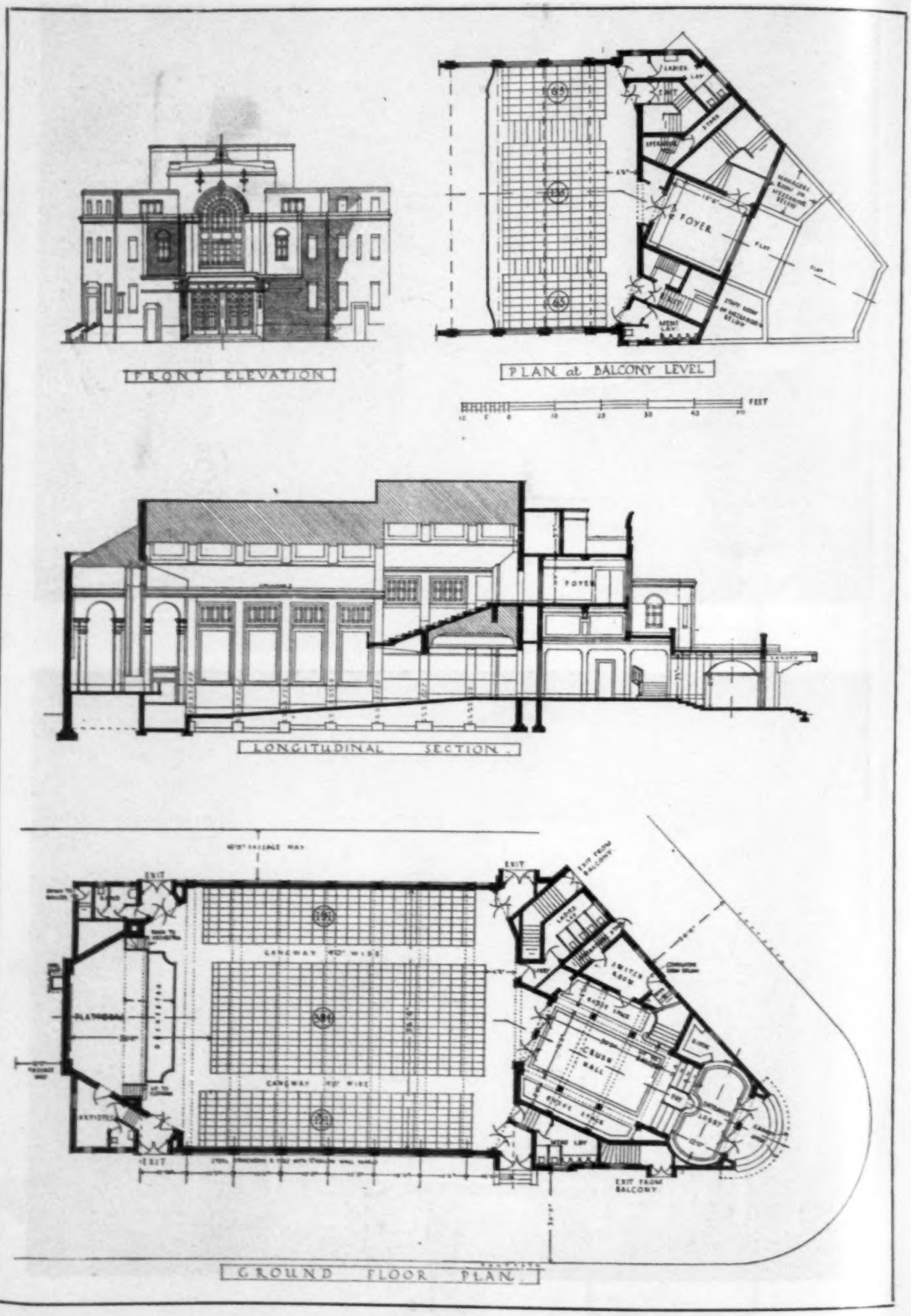
SIR BANISTER FLETCHER, P.R.I.B.A., Architect.

Entrance Hall.

Auditorium.

The Plaza Cinema, Stockland Green, Birmingham.

Mr. A. L. Snow, A.R.I.B.A., Architect.



The Plaza Cinema, Stockland Green, Birmingham.

Mr. A. L. Snow, A.R.I.B.A., Architect.

OLD ST. PAUL'S—VIII

By W. R. LETHABY.

TOMBS AND DETAILS

Tombs.

Two early tombs in the church were those of the Saxon Kings Sebba and Ethelred. These were marble chests of excellent form for which recesses were provided in the outer wall of the north aisle of the New Work. The tombs varied in detail, but were so much alike that both must have been works of one time, and this, I do not doubt, was after the Norman Conquest (Fig. 1). Of the other tombs illustrated by Hollar, the most beautiful was that of Henry de Lacy, eighth Earl of Lincoln, which was similar in style to the tombs of Edmund Crouchback and Aymer de Valence in Westminster Abbey.

De Lacy was the most important noble in

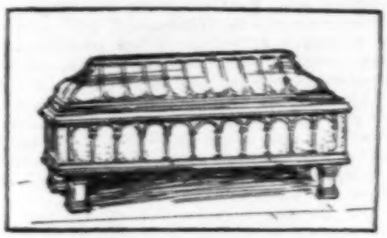


Fig. 1.

the realm at the death of Edward I. He was treasurer to Edward II, and was appointed Keeper of the Kingdom during the king's absence in Scotland. In 1310 "he entered on the way of all flesh." "Be it remembered that on the Sunday next after the beginning of Lent, Henry de Lacy Earl of Lincoln was brought from his house [Lincoln's Inn], with Earls and Barons and two Knights, armed, upon caparisoned steeds, and four mounted valets carrying four banners with the arms of Earl Henry, on the road unto the Church of St. Paul's, and on the Sunday after, he was buried on the right-hand side of the Altar of Our Lady in the New Work there, a great multitude being present." (Riley's *Chron. Mayors and Sheriffs*). For a week the body must have lain in state in the church.

From the large size of the tomb chest as compared with the effigy lying upon it and from the buttresses at the angles of the lower part, which are similar to those of the tomb of Aymer de Valence, De Lacy's tomb must, I think, have had a canopy. Stow says that the monument had been foully defaced and this may refer to the destruction of a canopy.

In a collection of sketches and notes, made in the last century by Lieut. Smith, now in the Victoria and Albert Museum (93, B. II. Vol. V), I have found some interesting details of the more important tombs in the old cathedral. These sketches, which are delicately drawn and coloured, are said to be "from a collection of the Monuments of Old St. Paul's lately in the hands of an antiquary at Brussels and belonging to an assemblage of curiosities intended for Josephine, the French Empress."

The effigy of Henry de Lacy was drawn from above in full face. He had a yellow surcoat (gold) lined with red, charged with a big purple lion; the mail was grey (possibly silvered); on the head was a yellow covering or coif. This effigy with the purple lion on its breast was clearly a worthy memorial of a proud lord (Fig. 2). The still more important but later tomb of John of Gaunt and his wife is represented by a coloured drawing of the male effigy. The armour was light grey as if silvered, and the flesh was painted. Lieut. Smith notes: "This view shows the left side, quartering France and England with indications of Castile and Arragon on the dexter: this sketch was taken from the collection at Brussels which seemed to contain most of the monumental effigies engraved by Hollar, and may have been the original designs which that artist had in his possession. It appears from this, as also from a seal of the Prince, that he was tenacious of the titular Kingdom of Castile."

Dingley gives a drawing of the knight's heraldic surcoat. The feet of the effigy rested on a lion, his wife's on a greyhound. Against the side of the tomb his lance and shield were attached. Munday (1633 described it as "a very goodly Tomb curiously framed of white stone, having his Lance and Target hanging by it." Sandford says: "Their portraitures were of alabaster. The upper part of which tomb was defaced in the late sacrilegious times, to make way for a gallery there built: and the remains burnt to ashes in the late dismal fire, An. 1666."

The effigy of Sir Simon Burley was fully coloured. The surcoat was banded black and yellow, and on the breast was an escutcheon; the flesh was painted. Dingley has a sketch of this also. Sir John Beauchamp's effigy had a surcoat of gold and red, charged with gold crosses; the armour was gilt. A collection of drawings of the tombs, now in the possession of Lord Winchelsea and Nottingham, was exhibited at the Society of Antiquaries in 1890. The collection was described as "A folio volume of original drawings, made under the direction of Sir W. Dugdale for Sir Christopher Hatton in 1641. Dugdale himself in a prefatory note says that: Anno 1641 having with him one William Sidgwick (a skilful arms painter), he repaired firstly to the Cathedral of St. Paul's in London and next to the Abbey church in Westminster, and there made exact draughts of all the monuments in each of them, copying the Epitaphs according to the very letter and also all the arms in the windows or cut in stone. The volume has descended with the Hatton estates. The contents include beautiful coloured drawings of the stained glass, shields of arms, monuments, effigies and monumental brasses, very many of which have been destroyed and of which this volume is the only record." (*Proceedings Soc. Ant.*)

A picturesque later tomb was that of Richard Fitz-James, Bishop of London, who

Fig. 2.

died in 1521. Stow says that he was buried "hard beneath the north-west pillar of Paul's steeple under a fair tomb, and a Chapel of St. Paul builded of timber with steps mounting thereto over his tomb of grey marble, 1521. His Chapel was burned by fire falling from the steeple; his tomb was taken thence." In Machyn's Diary we are also told that the bells fell from the steeple by "the chapel where the old bishop was buried under." This chapel must have been an upper story after the manner of Henry V's at Westminster, but of wood like the "Watching Chamber" at St. Albans.

Thomas Kemp, Bishop of London, was buried in "a proper chapel of the Trinity by him founded in the body [nave] of the church in the north side, 1489." Dugdale gives a good plate of it by Hollar. On the cornice were carved coats of arms (his own and the See of London) with busts of angels. Dingley made sketches of the bishop's shield (bearing three sheaves within a border) and of inscribed scrolls carried by the angels (Fig. 3).

Several fine brasses are figured by Dugdale. Chief of these was that of a bishop with elaborate canopy work. One of the subjects was the Annunciation, treated in a way I

Fig. 3.

have not otherwise seen. The Angel and Virgin are on either side of a tree, seemingly a reference back to the Tree of Temptation.

Much more about the tombs might be gathered from various sources such as Weever and Dingley. A MS. in the British Museum (Harl., 5441) contains notes on the earlier monuments in the handwriting of Stow (p. 40). His printed account of them only agrees with this in details, the order is different, and there are other variations. In the MS. the graves are mentioned with the altars near which they were placed. Thus the bishops Ralph Baldock and John Chishull are said to have been buried at the altar of St. Erkenwald. These tombs were not close together, and at a time subsequent to the destruction of the shrine with its altar they would hardly have been described in relation to this altar. Again, information is given which would not have been on the tombs. It seems probable, therefore, that these notes may have been taken from an old register rather than directly from the tombs. Careful study of this document would probably bring out some new facts. In the same volume are memoranda on the bishops of London. Another MS. in the Museum (Vitellius, F xii) is stated to have some list of the tombs, but I cannot find it.

The tombs suffered great injuries during the century 1550-1650. Henry Peacham says of the tomb of Sir Thos. Challoner, "who compiled the elegant book of Latin verses" in the time of Henry VIII: "He was buried in Pauls near to the steps of the quire towards the South door under a fair marble: but the brass and epitaph, written by Doct. Haddon, by sacrilegious hands is since torn away. But the Muses and Eternal Fame have reared him a monument more lasting and worthy the merit of so excellent a man."

In the crypt of the modern cathedral are kept several important fragments of some of the later tombs, an illustrated account of which is given in a recent volume of the Survey of London. One of these is the upper part of the effigy of Sir Nicholas Bacon, the great Lord Keeper, 1578. Camden, mentioning it, says he was "a man of deep reach and exquisite judgment." Paul Hentzner also speaks of it. That this national monument should be so hidden away is amazing: a way of making use of such a treasure might easily be found without improper "restoration."

The Altar and Shrine.

In 1309 Ralph de Baldock, the Bishop, agreed with Master Richard Pickerel, citizen of London, concerning the great *tabula* for the high altar, carved with divers images, adorned with gilded plates, stones and enamel and two pillars fitting the same, and woodwork painted, which was to be set up in the Cathedral in consideration of 200 marks and two robes. The work was in hand for some years at the Hospital of St. John at Clerkenwell, together with a shrine which had been given to the bishop by the said Richard. This was evidently a very splendid work; 200 marks must represent about £2,000 of our money.

Some altar frontals which are said to have come from the Cathedral are in Spain. (*Proceedings Soc. Antiq.*, xvii.)

In the New Work the shrine of St. Erkenwald, with a small altar at its west end, occupied the chapel behind a screen wall. The shrine was of a size comparable with that of the Confessor at Westminster or of St. Thomas at Canterbury; in a will of 1329 it is called the tomb of St. Erkenwald. It was of silver gilt adorned with reliefs, images, and precious stones. Additions and renovations were made in 3 Hen. IV by John Grantham silversmith, Herebright the painter, and others. With its altar it was surrounded by a tall iron railing. An illustration given by Dugdale shows this railing and the gable end of the shrine, an elaborate piece of work with window-like panels, pinnacles and buttresses. The space enclosed by the high railing must have formed a chantry somewhat resembling that of Henry VII at Westminster. Dugdale says: "Of this glorious Shrine, as also of the Iron Grate which enclosed it, extending to five foot 10 inches in height, having Locks, Keys, Closures and Openings; and was also tinned over, I have, in its proper place, exhibited a true representation, from the very original draught, made for a direction to the Smith that wrought it, which Grate weighing 3438 lib., at the rate of 4d. a pound amounted to £64 2s. 0d." The drawing, it appears, must have been still at St. Paul's.

Sedilia and Throne.

Dugdale also tells us of "the picture of St. Paul richly painted, and placed in a beautiful tabernacle of wood, on the right hand of the High Altar in anno 1398, the price of its workmanship amounting to xii *li.* xvi *s.*" From the original documents still preserved at St. Paul's we find the name of the painter. One of these is an agreement made in 1398 between the Dean and Chapter and Herebright de Cologne, citizen and painter of London, by which he undertook to paint an image of St. Paul with its tabernacle of carpentry, situated at the end and right part of the principal altar of the said church, for twelve marks or more, if necessary. Twelve marks is £8, equal to about £100 of our money, and more was necessary, for a second document is a petition in French from Herebright the painter that he might be allowed £12 16s. for painting the image of St. Paul in the church. (*Cal. St. Paul's MSS.*, p. 30.) This painting with its tabernacle may, I think, have been at the sedilia; this would explain why it is said to have been at the right side or end of the altar. Moreover, as I have shown in regard to Westminster Abbey, a painting of St. Peter, its patron saint, dedicating the church, was painted on the Sedilia there. For St. Paul's we may imagine the tall bearded man with his sword and book. Herebright would have been settled in the city to be described as citizen and painter of London, and he was working for the Cathedral a few years later (3 Hen. IV). In this year amongst expenses regarding gilding and other work to the "tomb" of St. Erkenwald. Herebright the painter was paid 26s. 8d. (Dugdale, p. 237.) He must have been a distinguished man, and it is *possible* that he may have painted the great portrait of King Richard II at the Abbey, also the King's tomb canopy, and the Doom paintings in the Chapter House, and the wonderful Wilton diptych now in the National Gallery. Some or all these, however, were more probably the work of Andrew Beauneveu, the famous Flemish painter, who, according to Froissart, did some work for Richard II. At this time the School of Cologne was doing work almost indistinguishable from that of the Flemish masters. It may be mentioned that Herebright was probably not the only German painter who had worked in London. A document at St. Paul's, apparently of the thirteenth century, is a grant of land in the parish of St. Peter, Broad-street, "to Master Lothewic the painter." William of Nottingham, painter, is also mentioned in the documents.

There must have been a bishop's throne in the Church, but the only reference which I have found to it is in an account of the instalment (by proxy) of Bishop Sheldon in 1660. "The same ancient chair or see which so long had stood in the great cathedral till by the iniquity of these times it was pulled down and thrown aside (when the Organ and rest of that famous Choir was broken and embezzled) was preserved to this day for its ancient and sacred use, and restored to the place where it formerly stood: so as the choir itself seems to have been this day installed." (*British Magazine*, 1838, p. 515.)

Screen and Organ.

At the entry to the choir was the Pulpitum or Choir Screen, having an elaborate front of late fourteenth-century work. In the middle was a recessed porch-like doorway containing rich metalwork gates. According to Dugdale, Sir Paul Pindar, "having at his own charge, first repaired the decays of that goodly partition made at the west end of the Quire; adorning the front thereof, outward with fair Pillars of black Marble, and Statues of those Saxon Kings which had been Founders or Benefactors to the Church; beautified the inner part thereof with figures of Angels." This was about 1635, and I have little doubt that statues of Kings had existed before the fire of 1561. The Screen at York, which has much in common with that of St. Paul's, is adorned with statues of English Kings. The statues of the west front of Exeter Cathedral are in the same tradition. At St. Paul's, founded by the saint King Ethelbert, such a series would have been specially appropriate. The kings represented in 1635 were Ethelbert, Athelstan, Edgar, Canute, and William the Conqueror: there were also the Bishops Erkenwald, Maurice, and Richard (Sparrow Simpson's *Gleanings*.)

In the loft of the choir screen was the principal organ of the church. A document of 1598 notes that the bell-ringers admit persons into the organ loft for money "to the decay of the instrument, the pipes being many of them underfoot." Machyn's Diary, describing the fire of 1561, tells how the spire and timber roofs were burnt, "And the bells fell below where the great Organs stood." That is, from the central tower into the crossing. The "Rites of Durham" (1593) describes the organ in that cathedral as being of the "same making" as two others, "one paire in Yorke and another in Paules. . . . The pipes being of the most fine wood and workmanship, very faire, partly gilded upon the outside and inside of the leaves [folding doors] and covers to the topp with branches and flowers finely gilded with the name of Jesus."

The Rood.

In the Nave was a great Rood set up high in a loft. In 1346-7 a light before the great Cross in the body of the church is mentioned. In 1538 the loft is described as a "halpas" ascended by two stairs where the Rood did stand with two altars and things to stand candles upon. (Sparrow Simpson, *S. Paul's and City Life.*)

In 1547, "the sixteenth day of November, the Kings Majesties visitors began that night to take down the rood with all the images in Paul's Church which was clean taken away, and by negligence of the labourers certain persons were hurt and one slain in the falling down of the great cross in the Rood loft, which the papish priests said was the will of God for the pulling down of the said idols. Likewise all images in every parish church in London were pulled down and broken by the commandment of the said visitors." (Sparrow Simpson, *Chapters Hist. S. Paul's*, p. 290.)

According to the Grey Friars' Chronicle, the date was November 17, when at night "was pulled down the Rood in Pauls with Mary and John with all the images in the church, and two of the men that laboured at it were slain and divers other sort hurt." In the time of Bishop Bonner "the Rood with Mary and John all brightly painted" were set up again.

There was also another famous crucifix known as the Rood at the North Door.

Pavement.

The floor of the church was mostly covered with marble squares set diagonally. This is shown by Hollar, and part of such a pavement exists as before mentioned in the cloister walk. We have seen that a marble pavement was agreed for in 1312 "by the foot," and probably the slabs were 12 in. square, as that seems to have been a standard size. Some parts of the thirteenth-century floor still remain at Westminster Abbey, and these show that the foot was then the same as ours.

In Harrison's description of England, in an account of stones for building, he says: "These I have named are not of the best in comparison of those whose places of growth are unknown to me, whereof the black marble spotted with green is none of the vilest sort, as may appear by the parcel of the pavement of the lower part of the Quire of Paul's in London (and also in Westminster), where some pieces are yet to be seen if any will look for them." The stone described can hardly be any other than green porphyry, and it is curious to find in Conyer's MS. account of the excavations for Wren's church mention of this material having been discovered. "Now at the east end of St. Paul's near the School, about 15 feet deep, was found shreds of the pretty green serpentine hard stone or Egyptian marble and the Porphyry or red and white much like jasper and other coloured stones used in the mosaic work of St. Edward the Confessor's monument at Westminster, which tells me this lying so low and the Roman pavement 6 or 8 or 10 feet deeper, that as time passed away so I might see the epochs or beginnings of times. The Roman concerns lay deepest, the higher those of more recent or fresher concern." The level was evidently a mediæval ground surface: were the shreds of serpentine and porphyry waste from the time when a floor of such coloured materials was laid down?

Sculpture and Painting.

From the time of the completion of the New Work there was in it a famous work of sculpture or painting representing the Annunciation. A will of 1329 bequeaths 13s. 4d. to the Tomb of St. Erkenwald, "also at the Annunciation." In 1336 William Rokesle left a third of his movables for "doing something honest" about the representation of the Annunciation of the Virgin Mary in the New Work of St. Paul's (Sharpe, *Wills*). "Something honest" is a nice phrase.

There was another famous image of the Virgin on the south side of the Nave. In the Nave was also a statue of St. Wilgeforte.

About 1321, Roger de Waltham, a canon, "founded a certain Oratory on the South side of the Quire towards the upper end; to the honour of God, our *Lady*, Saint *Laurence*, and *All Saints;* and adorned it with the Images of our *blessed Saviour*, Saint *John Baptist*, St. *Laurence* and St. *Mary* Magdalen; so likewise with the pictures of the Celestial Hierarchy, the Joys of the blessed Virgin, and others; both in the roof above the Altar, and other places within and

without." In the south wall opposite the Oratory he erected a glorious Tabernacle which contained Images of the Nativity with the Ox and Ass. Above this was an image of the Virgin standing with the Child in her arms. On a beam crossing from the Oratory to the Nativity were images of Christ and his Mother sitting in a tabernacle, a Coronation of the Virgin, and of St. Katherine and St. Margaret. "Neither was there any part of the said Oratory, or roof thereof, but he caused to be beautified with comely Pictures and Images; to the end that the memory of our blessed Saviour and his Saints, and specially of the glorious Virgin, his Mother, might be always the more famous. In which Oratory he designed that his Sepulchre should be." (Dugdale.) This must have been a tomb chapel between two of the columns on the south side of the Choir, with the beam supporting the Coronation of the Virgin across the aisle. Evidently it was a wonderful work. A painting in Exeter Cathedral has a large central figure of the Virgin surrounded by the celestial hierarchy.

In the Jesus Chapel (Crypt) was an interesting painting before which the grave of the Countess of Shrewsbury was situated. "The image of Jesus was curiously painted on the wall over the door that entereth into the chapel and the portraitures of Lady Margaret Countess of Shrewesbury kneeling in her mantle of arms with her progeny" (Stow). Beneath the painting was inscribed:

"Jesus our God and Saviour,
To us and ours be Gouernour."

On the roof of the nave and transepts were painted coats of arms of benefactors. According to Dingley, who says there were twelve and describes some of them, these could not have been earlier than the sixteenth century.

Stained Glass and Heraldry.

A manuscript in the British Museum (*Lansdowne* 874) contains sketches taken in 1609 of coats of arms in several windows on the north and south side of the Choir. The date of these seems to have been about 1400. Some of the sketches have been reproduced by Dr. Sparrow Simpson with a full account of the heraldry. On the lights were large shields, doubtless those of individual donors, and some of the borders had various smaller shields, probably those of other benefactors. This profuse use of heraldry reminds me of the well-known passage on stained glass in Piers Plowman's Crede: "Shynen with shapen sheldes to shewen aboute."

The borders must have been 6 in. or 7 in. wide, for the charges, being in their proper colours, were evidently "leaded up." One of the larger shields bearing three buckles in chief, a fess, and then a fox below (Sparrow Simpson calls it a lion) must be that of a goldsmith, I think, for the border is of squares containing the bearings of the Goldsmiths' Company—a covered cup between four buckles (Fig. 4).

An engraved tonsure plate from St. Paul's in the British Museum bears the greater part of a lion rampant with a forked tail. It is illustrated by Sparrow Simpson, and I suppose it is the bearing of Simon de Montfort.

Fig. 4.

Clock and Font.

In the Nave was a famous clock which is mentioned from the thirteenth century. In 1286 a document at the cathedral refers to the allowances of food to be allotted to "Bartholomeo Cralogario." In 1298 a canon directed that he should be buried in the aisle near the clock.

In 1546 the Dean and Chapter agreed with Bryce Augustine of Lyme Street that he or his executors should "well and trewly repayre & mayntayne the clock orlage and dyale sette and beying on the northe side of and within the sayde cathedral churche, in true and due order forme and course from tyme to tyme during the lyff natural of the said Bryce," etc. (*Cal. St. Paul's MSS.*, p. 52.)

On November 22, 1344, the Dean and Chapter entered into an agreement with Walter le Orgoner of Southwark for certain works on this clock. The said Walter was to make a dial with wheels and all manner of works appertaining to the same and for turning the Angel above *l'orologe* so that it should be good and profitable to show the hours of the day and night. Walter was allowed to take for himself the old works (*ustiments*) which were no longer serviceable. The long contract in French is printed in Vol. XII of the *Archæological Journal* with some account of other early clocks. Here it is pointed out that in the clock at Wells there is a turret above the dial around which four mounted knights revolve when set in motion by the clock. "This may possibly serve to explain the expression in the agreement—'*au turner del Angel par amunt lorologe.*'" I imagine that the Angel of the clock of St. Paul's turned its head, raised a hand and moved its wings at the hours.

It appears from a reference in Thomas Decker's *Horne-book*, 1609, that at this time the clock had other mechanical figures besides, or instead of, the Angel. "The great dial is your last monument. . . . Observe the sauciness of the Jacks that are above the man in the moon there; the strangeness of the motion will quit your labour." Again, "If Pauls Jacks be once up with their elbows and quarrelling to strike eleven, as soon as ever the clock has parted them and ended the strife with his hammer. . . ."

In 1388 Sir John Montacute desired to be buried "near the Font where I was baptised." It was in the nave and was made use of as a place for the payment of money even in old days, as appears from a reference to it by Bishop Pilkington.

Inscribed Tablets.

When Dugdale wrote his description of St. Paul's there were many "hanging tables," or written inscriptions, epitaphs and the like, in the church. Several of these are represented in Hollar's illustrations of the Tombs. There cannot be any doubt that they were mediæval documents. At Westminster similar inscriptions were hung in the Abbey. For example, Dart tells of "some writing not legible on parchment framed" hanging by Sebert's tomb. This writing was printed by Keepe and others and I have found that it was given by Richard of Cirencester, a monk at the Abbey in the fourteenth century. At Glastonbury there was a large tablet consisting of several folding leaves which told the histories of Joseph of Arimathea, Arthur, Patrick, etc. This *Magna Tabula* has fortunately been preserved, and the writing shows it must have been made in the fourteenth century. "The Tabula was probably set up in a conspicuous place in the church for the edification of visitors." It appears to have been "fixed to a wall in such a way that it could be opened out like a book" (Dr. Armitage Robinson, *Two Glastonbury Legends*).

Some of the "tables" at St. Paul's were written in double column like a diptych. Such were those hanging over the tombs of King Sebba and King Ethelred. The former ended with a reference to Bede; the second tells us that Ethelred reigned in great tribulation.

"In a certain tablet, with large characters, heretofore hung on the north part of the Quire," was written the dimensions of the church and height of the steeple as they were measured in 1315, and doubtless the writing dated from that time. Evidently it was the custom in great churches to explain things and make them interesting: no plea had been made that churches must not be like museums.

If this were written over again without references, and in a more flowing way, we should obtain quite a good impression of the furnishings of the great church.

[The title of the work by Wilkinson mentioned in the last part should have been *Londina Illustrata.*]

"THE BUILDER" DEBATE

XXXIV.—TRAINING FOR ASSESSORS.

Sir,—The usual panacea for all political ills is the appointment of a Royal Commission. That for all Army deficiencies used to be a course of training. All these things are excellent in their way, but it is a mistake to assume that once the step of initiating one or the other is completed, the whole problem at issue is solved. Very often it is found that all that has been done is to create a new bundle of problems, more wicked than the first. That is likely to be the outcome if we adopt the Army model and send our assessors on a course of training. Men are not machines, which latter can be tested and stamped. A diploma professes to be the stamp of efficiency, but rarely proves infallible as such, mainly because no course of training can anticipate all the governing factors.

But if we grant that a course of thorough training meets this particular case, and that a diploma might be usefully founded for the decoration of assessors, where are we to find the men to instruct in the course of training, and to adjudge the awarding of diplomas, if, as "Positive" seems to think, the quality of assessing at the present time is so universally inefficient? It stands to reason that efficiency cannot be taught by the inefficient. If, on the contrary, we have sufficient good assessors now with which to found a school of training, why not use them for the purpose of assessing?

There is also another sound objection to his suggestions. We want all the versatility we can get in the judgment of our competition results. We do not want to wrap the system round with red tape and surrender the responsible task of assessing competitions to a few, or, for that matter, to a lot of, men who have passed through a theoretical course upon essentially hypothetical experience. We want, rather, wherever possible, the competition for a hospital to be assessed by a man who has had experience in actually building hospitals—who knows the practical considerations of planning, as applied to a specific site, as well as the theories which can be learned on paper. We want all specialist buildings which are to be subject of an open competition to be judged by men whose judgment is based on fact rather than on theory; and I cannot see how this range of experience can be obtained out of the products of a course of what must be essentially an academical training.

Still another objection is that there are already far too many diplomas and degrees in existence, by which the public is confused instead of enlightened. I can see no useful purpose in adding to the number of letters which the clever examination student can collect to his name. Nor do I think for one moment that the average promoter would have any more confidence in entrusting the scales of judgment to a man with a paper qualification. They will continue to trust the man who has tasted the realities of practice in the hard world of experience.

NEGATIVE.

SOME NOTES ON GERMAN DESIGN AND MATERIALS.—III

By FRANK BENNETT, A.R.I.B.A.

THE Germans have fully realised the bad taste of meaningless ornament. At the same time, they cannot seem to arrive at a logical ornament to suit their modern buildings, so they have adopted a wise if somewhat inadequate course and omitted it altogether.

An exception to this is the plasterwork decoration. There is not much of it to be seen, but when found it is usually of a very high quality. The two doorways at Rheil (Figs. 13 and 17), set against façades of the normal severity, are remarkable both for imaginativeness of design and vigour of craftsmanship. While the settings may be a trifle heavy, the detail combines a strong flavour of the Baroque with a modern feeling for rigidity. The doorway in Fig. 15, an entrance to a new block of flats by Eric Mendelssohn, is again on Baroque lines, but decorated with a more simple design of plasterwork which justifies itself by reason of structural suggestion of corbelling over the opening.

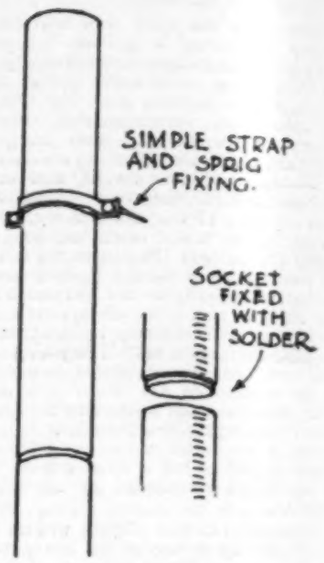
FIG. 12.

The little basket of flowers in Fig 12 comes from a small house built some five years ago near the Flughaven at Berlin. It is placed as a focal point between blue-shuttered windows on a wall of pink colour and is itself the natural grey of stucco. Its light relief and direct modelling, entirely suitable to the house which it decorates and to the subject depicted, are its special merits.

On first sight, the two filling stations opposite the entrance to the Templehof flying grounds (Fig. 16) give the impression of being structures unnaturally forced in shape. In reality their strange form is quite reasonably justified by utility. Each ascending shelf is a hollow, glazed pan containing lights and reflectors which illuminate the towers to act as beacons seen from distant points on the approaching roadways at night-time. Spreading from the bases are wing-like shelters to cover in the pumps and to protect alighting motorists from rain. These are reinforced concrete structures cast with a pebble aggregate, which gives a pleasant finished colour of yellow-grey.

The latest tendency in joinery work is to reduce all labours to the minimum. On quite important work, such as doors to restaurants and theatres, mouldings will be entirely eliminated and glazing fixed by means of battens spiked direct to the styles. To gain effect and distract attention, reliance is placed on some abstract quality in the design; on a metal handle of unusual shape; on metal-capped sash bars, or on a sudden piece of glass engraving. The necessity for economy, the reason behind so many new ideas in Germany, is, of course, the reason for this.

FIG 13.



4" RAIN WATER PIPES OF ZINC.

FIG. 14.

Figs. 14 and 18 show two common uses of zinc. 4 in. rain-water pipes of thin sheet zinc soldered at the joints and fastened to the wall with the simplest of iron straps are used in nearly all blocks of flats, and may even be seen on the face of new buildings in the Unter den Linden. They are said to withstand changes of temperature well, but they cannot be very lasting. The use of zinc for window cills, like the use of it for rainwater pipes, is apparently an established tradition. An economy is effected, but the space beneath must be properly backed up with mortar, and dowels used as a fixing. The value of this device depends a good deal on the way in which the edges of the material are joined to the walls at the sides.

German construction is moving more on American lines than our own. Changes are being anticipated, and the Germans do

FIG. 15.

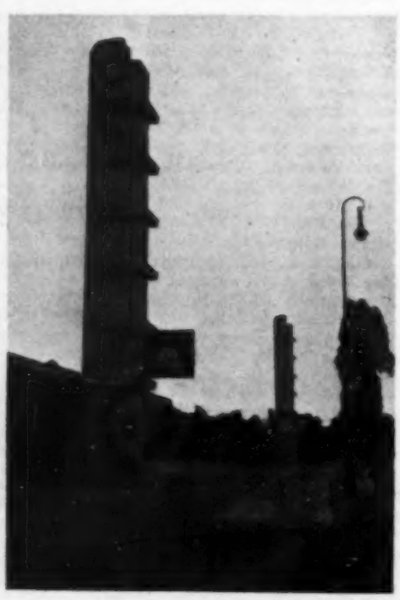
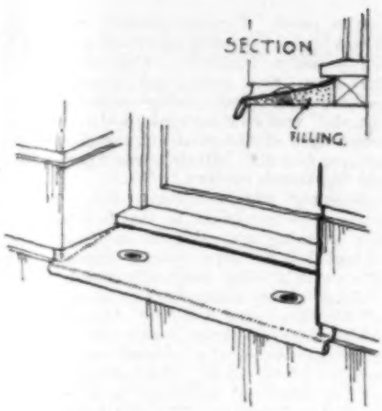


FIG. 16.

FIG. 17.



WINDOW CILL OF ZINC.

FIG. 18.

not wish to build for a great permanence; they want structures which can be altered in their usefulness with a change of fashion.

The modernism may be easily exaggerated in the minds of those who do not have the opportunity of visiting the country, and who may gather an impression from published photographs of the more exotic specimens of architecture. The modernism is more in the spirit than in the practice. Germany is a big country with a huge population, most of whom are imbued with the older ideas, which do not die out in ten years. The domestic architecture will probably stand as the best achievement of this generation.

(*Concluded.*)

AN ECONOMICAL FORM OF COMPOUND STANCHION.

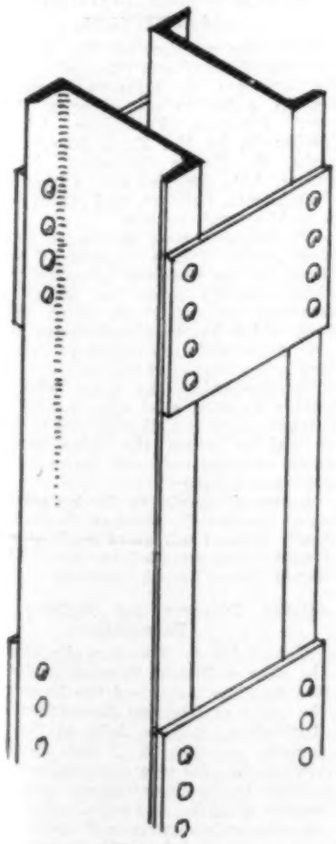


FIG. 19.

SOCIETIES AND INSTITUTIONS

HAMPSHIRE AND ISLE OF WIGHT ARCHITECTURAL ASSOCIATION.

A general meeting of the Hampshire and Isle of Wight Architectural Association was held at the Castle, Winchester, on Friday of last week. The President of the Association, Mr. J. Arthur Smith, F.R.I.B.A., of Basingstoke, occupied the chair, and was supported by the Vice-Presidents, Lt.-Col. R. F. Gutteridge, T.D., F.R.I.B.A., and Mr. J. W. Mountain, L.R.I.B.A., of Bournemouth, and the hon. secretary, Mr. A. L. Roberts, F.R.I.B.A.

Following the election of various new members as Associates, the hon. secretary made his report. In this he mentioned the meetings which the Council of the Association had had with the Southampton Civic Society to consider the problem of the future of the Bargate. It was a matter in which Sir William Portal was taking the keenest interest, and they were anxious that the mistake made at Canterbury of separating the gate from the walls should not be repeated at Southampton. He also reported that Mr. T. D. Atkinson and Mr. J. A. Sawyer had been elected by the Council to serve on the Advisory Committee of the Winchester Town Planning Committee.

The President said that numerically, as well as in other ways, the Association had advanced, and 40 new members during the year had brought the total to nearly 250. The Association thus had increased strength for co-operation with the Institute in the great development scheme upon which they were entering. The two chief features of the scheme were the improved organisation under revised by-laws, and the reopening of the Licentiate class of members. The revised by-laws had been approved by His Majesty's Privy Council, and, when in force, would operate for the consolidation of the profession and the advance of architecture. They would then be enabled to press forward the Registration Bill, which it was proposed to reintroduce in the next session of Parliament. The Institute was convinced that in this scheme lay the solution of the many difficulties standing in the way of the consolidation of the profession, and obstructing the progress of architecture. With regard to registration, it had been suggested in some quarters that the efforts for this had been unsuccessful. This was not the case. It was realised from the beginning that many years of patient persistence would be required to overcome the many difficulties, including those of passing a private Bill through Parliament. Yet in a little more than three years of campaigning the Bill had (1) been given a second reading in the House of Commons; (2) received a favourable verdict from a select committee; (3) passed through all the stages in the House of Lords; (4) received a certain measure of Government support; and (5) the interests opposed to it in the House of Commons had greatly weakened. For the accomplishment of the development scheme it was essential that every reputable and well-qualified architect should be brought into their ranks. That was an immediate task lying before them. All allied societies should enter into the spirit of the scheme and by meeting their responsibilities do their utmost to bring it to fruition. The proposal for reopening the Licentiateship of the Institute offered an entry to its ranks to many established architects who were non-members, and they should have no hesitation in thus enrolling themselves. He urged all members to see that assistants, pupils and students were attached to a society allied to the R.I.B.A. There was now an excellent spirit of unity among the allied societies, and agreement had been reached among them for transference of members from one to another without additional fees. The speaker then reviewed the activities of the Association during the past year. He mentioned the collaboration of the council with the Southampton Civic Society and the town planning authorities of Winchester, Alton, and Basingstoke, and the part played by the Association in safeguarding the amenities of Christchurch Priory. In conclusion, he expressed deep appreciation of the services of the hon. secretary, treasurer and librarian (Mr. A. L. Roberts), and of those of the Year Book editor (Mr. T. D. Atkinson).

Col. R. F. Gutteridge (Southampton) proposed a vote of thanks to the president, which was seconded by Mr. H. S. Sawyer, supported by Mr. A. L. Roberts, and carried with applause.

THE INSTITUTION OF CIVIL ENGINEERS.

In his presidential address before this Institution on November 4, Sir George William Humphreys, K.B.E., reviewed the activities of the premier municipal body of the Empire from his standpoint as Chief Engineer and Administrator of Housing of the London County Council—a body with which he had been associated for the past 28 years. During this period the population of Greater London had increased from 6,600,000 in 1901 to nearly 8,000,000 to-day, while that of the County had shown a slight but steady diminution. The problems which arose from this growth and redistribution of the population concerned both the administrator and the engineer in close relationship and were of wide interest to every Londoner. These problems included all the modern requirements of so large a community: adequate means of communication, whether by road, railways or water, water-supply and drainage, refuse collection and disposal, telephone and telegraph, electricity and gas, housing and town planning, all on a very extensive scale.

The presence of the river in our midst had, however, brought about conditions that had called for the skill of the engineer to provide ready means of crossing it. London, originally a small settlement on the site of what is now the city, had spread approximately to an equal distance on both sides of the Thames. Bridges and, later, tunnels, were necessary to link up the activities on opposite banks. It was probably nineteen hundred years ago that the Romans erected the first bridge over the Thames at, or near the site of, London Bridge, but the old stone bridge known in English history as such was commenced in 1176, and lasted through many vicissitudes to its demolition in 1832, a year after its substitute, the present bridge, was opened to traffic. The eighteenth century saw the completion of four further bridges, one at Westminster (completed about 1750), another at Blackfriars (completed about 1770), and, one each at Battersea and Putney. All these structures had, however, disappeared and had been replaced by others. The nineteenth century was more prolific in the provision of Thames bridges for, in addition to railway bridges, sixteen in all were constructed, counting replacements at Vauxhall and Hammersmith. The present century had been marked by the completion of new bridges at Vauxhall and Southwark and the construction of a new bridge at Lambeth, now in course of erection, and by proposals carried to an advanced stage for a bridge in the City opposite to St. Paul's Cathedral, and another on the site of Charing Cross railway bridge. The inadequacy of the foundations of some of the piers of Waterloo Bridge, necessitating the support of the bridge by temporary measures, focussed attention upon it in 1923-24, and a Royal Commission which sat in 1925 adumbrated a large programme of bridge and road communications, either in the County or just outside its borders, involving an estimated expenditure of £27,500,000. The Committee followed, among other things, a decision of the London County Council in December, 1925, to demolish Waterloo Bridge and to replace it by a structure having a carriageway for six traffic lanes and five arches. The Royal Commission recommended reconditioning the old bridge

and corbelling out the parapets so as to give sufficient width of carriageway to take four lines of vehicles abreast. Their recommendations in these respects were, however, accompanied by another, advocating the construction of a road bridge on or near the site of the Charing Cross railway bridge. The Government of the day urged the adoption of these proposals and the London County Council deposited a Bill in the last session of Parliament for powers to construct a road bridge on the site of the railway bridge leading to Charing Cross terminus and a new terminal station on the Lambeth side of the river in lieu of the present terminus at Charing Cross. These proposals, although they found favour with the Ministry of Transport and the Southern Railway Company, failed to find favour with a Select Committee of the House of Commons and the Bill was rejected. The London County Council had recently called together a Special Advisory Committee, nominated by various interests. This Committee was now in session with the object of seeing whether it would be possible, after a close study of the problem, to suggest a lay-out that would meet with general approval. What the findings of this Committee would be it was not possible to say, but the story of the endeavours, extending now over six to seven years, to find a solution for what was in the main an engineering problem, namely, the steps to be taken to repair or reconstruct a failing bridge was an eloquent illustration of the delays attendant upon a multitude of counsellors. The problem was admittedly, however, not an easy one. The existing requirements of modern road users were not yet clearly understood, much less were those that would arise in the future. Waterloo Bridge was too narrow, as it stood, to play its proper part in the maelstrom of to-day's traffic flow; moreover, owing to its position on a bend of the river, it could only be navigated under helm, and utility called loudly for a wider bridge for road traffic and one with fewer, and, consequently, more commodious arches. On the other hand, it was a structure which in its present form had commanded widespread admiration for its simple and dignified treatment. Many held the view that it was the only type of structure that would harmonise and accord with its setting.

Attention had been called to the process of steady absorption of open country by streets and buildings that was daily taking place in Greater London. A Greater London Regional Planning Committee, constituted under the auspices of the Rt. Hon. Neville Chamberlain in 1927, when he was Minister of Health, was now in being. It was representative of the various local authorities in London and the Home Counties, and issued its first report last December. The area under their review was that of the London and Home Counties traffic area previously alluded to as covering about 1,820 square miles, roughly the area within a radius of 25 miles from Charing Cross. Dr. Raymond Unwin, F.R.I.B.A., their technical adviser, was of the opinion that the minimum requirements for this area as regarded open spaces and playing fields was not less than 206 square miles, and suggested that "the problem of town planning should be approached from the point of view of planning ample though selected tracts for building development on a background of open lands, rather than as has hitherto been the case, from that of planning limited tracts of open space to be reserved on a background of unlimited potential building development." The provision of adequate open spaces and the proper lay-out of main lines of communication obviously formed the skeleton or framework of the picture that a well-ordered community should present, the details of which time alone could fill in and bring to fruition. On the subject of the provision of adequate housing accommodation for the working classes, impossible of attainment in recent years without some financial sacrifice, the new houses which had been erected since the war were a feature of the countryside all over the kingdom, and the standard set and adopted could be said to be such that posterity would be the gainer.

LIVERPOOL ARCHITECTURAL SOCIETY.

In his inaugural address as President of the Liverpool Architectural Society last week, Professor Patrick Abercrombie (Professor of Civic Design, University of Liverpool) said the greatest architectural event in recent years had been the scheme to build a new cathedral in Liverpool to the design of Sir Edwin Lutyens. It was an exceedingly interesting thing to have two cathedrals going up in one city, and an exceedingly exhilarating thing to have two great architects in friendly rivalry in their midst. He hoped that Sir Edwin's design might be amended before the cathedral was actually built. Both Charles II, in the case of St. Paul's Cathedral, and Dr. Chavasse in the case of the Liverpool Cathedral, had been good clients to their architects, inasmuch as they had given them a free hand to alter or improve their designs. He hoped Dr. Downey would be ar equally good client to Sir Edwin Lutyens, and not tie him down too much to his first ideas.

Turning to the ordinary architecture of Liverpool streets, the speaker said that four years ago his predecessor in the chair, Professor Reilly, offered Liverpool the resources of the Architectural Society to give free advice in the control of street elevations. That advice had not been taken, and evidently it was not desired. He suggested the issuing of a "Cautionary Guide to Liverpool," which might perhaps shame Liverpool into taking more care of the more ordinary type of building in its midst. At the same time, he acknowledged that in addition to Liverpool's fine collection of old buildings and the cathedral, a large volume of good things was growing in their midst—churches, banks, shops, schools, houses, and public-houses, from all of which much of the art and practice of architecture could be learned. Turning to rural architecture. Professor Abercrombie recommended the adoption of a co-operative scheme which had been approved by the Royal Institute of British Architects, whereby architects, at very low fees, would supply designs for small houses which could be used by prospective builders, who would thus have no excuse for putting up poor stuff.

It was announced that the H. W. Williams Scholarship, valued at £50, had been awarded to Mr. R. P. S. Hubbard, with Mr. Frank H. Littler honourably mentioned. Both Messrs. Hubbard and Littler are four-year students at the Liverpool University School of Architecture.

INCORPORATED ASSOCIATION OF ARCHITECTS AND SURVEYORS.

Mr. Edward Yates delivered a lecture on "English Ironwork" before the London and Home Counties branch of the Incorporated Association of Architects and Surveyors on October 28. Mr. W. H. Heath was in the chair.

Just over a century ago, in 1828, said the lecturer, the Ashburnham forge, the last of the long line, ceased work. How much of the early history of ironfounding could be forgotten and obliterated in a hundred years was realised when one tried to find even the sites of the old works. That the industry, besides flourishing in the Sussex portion of the Wealden area, dated at least from Roman times in the Surrey portion was well proved by the finding of coins of Vespasian, Nero and Diocletian in *scoria* heaps at Maresfield, Beauport Park, Seddlescombe, East Grinstead, and elsewhere; but, unlike the case of the Forest of Dean, there was, as far as he knew, no good evidence of pre-historic working.

After a description of the various traditional methods of founding and working, the lecturer showed a number of slides illustrative of early examples of the craft. The first was of a cast-iron plate laid in the floor of Burwash Church. This slab, said the lecturer, bore an ornamental cross and inscription in relief. Experts generally agreed that it was the oldest existing article produced by the Wealden foundries. Originally laid on the floor, the cross and inscription had suffered badly from being walked over, and the slab was now secured to the wall. The exact date of the production could never be known, but the lettering was Lombardic, of the fourteenth century.

Showing another grave slab, the lecturer drew attention to the fact that while the lettering was of good design, the individual letters were placed illiterately, the F's and S's being frequently upside down.

After giving some description of the birth of the iron gun and the financial success which attended those ironmasters who undertook such work, the lecturer touched on the subject of fire-backs, also an important part of the founders' business, as every cottage needed at least one. The cast fire-backs were found in a wonderful variety of size, shape and ornamentation, from the simple to the elaborately decorated, having heraldic, floral, allegorical, Biblical, and other subjects—depicted with bold and vigorous modelling. The plain, early variety, simply panels, edged perhaps with a cable or a simple moulding produced by a rope or piece of wood pressed round the edge of the sand mould, would present a surface which, it was soon seen, could be decorated. At first the decoration was effected by impressing on the sand mould some common and ready-to-hand object, such as the palm of a hand, a short piece of rope, a household knife, and so on, or marking the mould with some blunt-pointed instrument. Others later bore designs obtained by impressing wooden stamps carved in the form of letters, numerals, animals, etc.

Further examples of the craft shown by the lecturer included fire-dogs, stocks (for refractory villagers), ox-shoes, chimney-cranes, rushlight-holders, gates, etc. In conclusion, said the lecturer, it was well to remember that the first iron railings cast were placed round St. Paul's Cathedral.

SOUTH WALES INSTITUTE OF ARCHITECTS.

Under the auspices of the South Wales Institute of Architects (Central Branch) and the Institute of Builders (South Wales Branch), a lecture was given at the Engineers' Institute, Park-place, Cardiff, on October 30, by Mr. E. J. Bolwell, clerk of works, St. Paul's Cathedral. Mr. J. F. Turner, J.P., presided over a large audience of architects, builders, and others interested in architectural matters.

The lecturer took as his subject "The Work at St. Paul's Cathedral," and with the aid of an excellent collection of lantern slides specially taken for the purpose, he described in detail the great scheme of work which has been undertaken during recent years with the object of restoring St. Paul's. He described the nature of the work in strengthening the piers with bars of Firth's stainless steel and cement, and also the extremely complicated and difficult task of making secure the dome supports by means of great rods and chains of the same non-corrosive metal.

A vote of thanks to the lecturer was proposed by Mr. H. Norman Edwards, of the South Wales Institute of Architects (Central Branch), and seconded by Mr. T. E. Gough (South Wales Branch, Institute of Builders).

District Surveyor and Building Surveyor Examinations.

The R.I.B.A. Statutory Examination for the office of District Surveyor under the London Building Acts, and the Examination for the office of Building Surveyor under Local Authorities, will be held at the R.I.B.A., London, on May 6, 7 and 8, 1931. The closing date for receiving application for admission to the Examinations, accompanied by the fee of £3 3s., is April 15. Full particulars of the examinations and application forms can be obtained from the Secretary, R.I.B.A.

THE ARCHITECTURE CLUB

A SUPPER-DISCUSSION of the Architecture Club on "Function—as Expressed in Modern Swedish Architecture" took place on Thursday, October 30, at the premises of the Architectural Association, Bedford Square, W.C., the chair being occupied by the President of the Club, Mr. E. Holland Martin.

Mr. F. R. Yerbury first showed a series of lantern slides of the Stockholm Exhibition buildings, 1930, and briefly described them. In the unavoidable absence of Professor C. H. Reilly, the discussion was opened by Mr. Charles Marriott, who said that the Stockholm Exhibition seemed to him to be an attempt to evolve a style from the principles of construction that were in force to-day. In all such attempts the first stage should be to find out what one could do without, and from that point of view the Stockholm Exhibition seemed to him to be a great success.

Mr. G. Grey Wornum, F.R.I.B.A. (President A.A.), said the Stockholm Exhibition was a great disappointment to him, because he had always felt that modern architecture and modern decoration in Sweden had as one of its merits the fact that it really echoed the life and temperament of the people. When he saw the Stockholm Exhibition he felt that there was something artificial, in a way, in the construction of the buildings. But the Exhibition did have one very great merit, and that was that the construction appeared to be very well done, very well thought out, and very economical. It seemed to him that the essence of this modern style was the use of the cantilever. There was a point about functionalism he would like to make. In 1847 the Architectural Association had as their motto, "Design in Beauty, Build in Truth." To-day, one had another sense of building in truth, and that was not so much to be truthful over materials, but to be truthful over the contents of the building, to express truthfully what the building was for. To-day, if we revealed the contents of our buildings we might perhaps be considered to be designing more truthfully than the people of fifty years ago. There was a tendency to develop everything on horizontal and vertical lines, and people were apt to confuse that with functionalism. They were merely using that as a device for imparting beauty to their building, and it was questionable whether abstract forms went as far as they should go at the present time in the achievement of beauty.

Mr. T. Hamilton Smith said that on his return from Stockholm he had, he thought, a clearly defined view of the merits and demerits of the exhibition, but he had since heard so many people discussing it from different angles that at the moment he had a hazy and confused notion of the whole exhibition. He was not very much impressed with the functionalism as expressed in the exhibition, but the individual pavilions, particularly those devoted to glass and pottery, were rather good.

Mr. Ivor Brown said one thing that struck him very vividly was that the Swedish architects were conscious of the fact that it was the business of the builder to express his own period. The Swedes were endeavouring to build small country houses in which people could pursue an existence characteristic of their time.

Mr. Clough Williams-Ellis said he thought we should be very grateful to the Swedes for "trying out" something which we had not. He thought they were sane enough to be trusted to keep their functionalistic architecture in its place.

Mr. Darcy Braddell observed that an exhibition was really a series of booths, and that was what the Stockholm Exhibition was. It might be stark, but there was no feeling of starkness about it. Functionalism wanted working out and made more human; at the moment it was only in its infancy.

Mr. Stanley Hamp said the more he heard the expression "functionalism" the less he liked it, because he felt that if what was claimed for it was true, instead of being architects they would all become engineers; instead of designing beautiful buildings they would design functional buildings, and call in artists to decorate them. That attitude was expressed quite forcibly in the Stockholm Exhibition. There were few forms that were beautiful, but those that were were eternal. He felt that an effort was being made among architects not only to try to improve this functionalism, but to "get down to" a simple form and to improve it in a new way; and that new way was made for them because of the new materials and new conditions. He thought that one should try to be functional, but he thought it was much more important to try to be beautiful, and if the two could be combined it would be genius.

Mr. Oswald P. Milne said he thought the Stockholm Exhibition depended for its charm upon two things: one, that it was in a most delightful position by the waterside, and, two, the numerous flags that were displayed everywhere.

After further discussion, the proceedings terminated with a hearty vote of thanks to the chairman for presiding.

Public Works Congress, 1931: Prizes.

The organising committee of the Public Works, Roads and Transport Congress and Exhibition have found it possible to increase the first and second prizes offered for papers submitted for discussion at the Congress. These prizes will, therefore, be as follows:—1st, gold medal and one hundred guineas; 2nd, silver medal and fifty guineas.

There will also be, as already announced, a third prize, consisting of a bronze medal and fifteen guineas, a fourth of ten guineas, and an additional award of five guineas for each other paper selected for discussion. Authors are reminded that papers must deal with one of the subjects covered by the objects of the Congress, viz.:—highways and bridges, water supply, sewerage and sewage disposal, cleansing, gas, electricity, housing and town planning, tramways and light railways, agriculture (small holdings, land drainage, land reclamation and agricultural education) and local government organisation. All papers must be received by the Hon. Secretary of the Congress, 84, Eccleston-square, S.W.1, by December 31.

Rent Restrictions Acts: An Inquiry.

The Ministry of Health and Secretary of State for Scotland have appointed a committee with the following terms of reference:—"To inquire into and report upon the present working of the Rent Restriction Acts (excluding the special provisions relating to agricultural cottages) and whether any modifications or amendments should be made to them." The secretary of the committee will be Mr. E. C. H. Salmon, M.C., of the Ministry of Health, to whom all communications on the subject should be addressed. It will be observed that the terms of reference to the above committee exclude consideration of the special provisions of the Rent Restriction Acts relating to agricultural cottages, but a committee has been appointed by the Minister of Health and the Minister of Agriculture and Fisheries with the following terms of reference:—"To inquire into the conditions of occupation of agricultural cottages in England and Wales which are either let to, or provided for, agricultural workers in consequence of their employment. To report upon the present working of the special provisions of the Rent Restriction Acts relating to such cottages, and to make recommendations as to any alterations which may be desirable in the existing law." The secretary of this latter committee will be Mr. J. J. Maynard, of the Ministry of Agriculture and Fisheries, Whitehall, S.W.1.

ILLUSTRATIONS

(*Continued from page 777.*)

a tarred plinth, while the gables are tile-hung, the roof also being covered with sand-faced tiles. The cills of the ground-floor windows are of two courses of tiles, and are carried round the building as a string course, giving a slight relief to the simple rough-cast. Compactness is the keynote of the plan, for it contains a large sitting-room and living-room, each having windows overlooking the drive, and the usual domestic offices. The first floor, which is formed in the roof, contains three bedrooms, together with bathroom and water-closet, and spacious cupboards are formed in the roof space at side of the principal bedrooms. The steel casements were supplied by Messrs. Crittall, and are fitted in wood frames. The general contractors were Messrs. W. James and Son, of Maidenhead.

"Tiverton," Potters Bar.

This house has been designed by Sir Banister Fletcher, P.R.I.B.A., in the Georgian style, and erected under his superintendence. The bricks for the façades were specially selected to give a somewhat mottled appearance, while stone quoins were used to give dignity. The wooden cornice has a projection of 2 ft. 6 in., thus throwing a heavy shadow and protecting the walls from rain. The roof is covered with green Westmorland slates laid in diminishing courses. The house is symmetrically arranged on a centre axial line, with the domestic offices to the north, well cut off from the rest of the house. The servants' bedrooms are provided in the attic story. A special feature has been provided by the oriel window over the entrance door, which is surmounted by a balcony and crowned by the wooden pediment.

The Plaza Cinema, Stockland Green, Birmingham.

This theatre occupies an important corner site at the crossing of two main arterial thoroughfares. The fact that the site tapers to a point made the problem of planning an intricate one. The ground-floor plan occupies the whole space available, but the upper stories are recessed in a series of planes, by which means the necessary breadth on the entrance front is obtained. The building is mainly a brick one, the facings being Messrs. Blockley's antique red facings, with patent stone strings and dressings by Dows Granolithic Co. The interior is designed on the simplest possible lines, the few mouldings being of slight projection, and reliance for effect has been placed on a careful use of contrasting planes and colour, carried out under the personal supervision of the architect, Mr. A. L. Snow, A.R.I.B.A. The special technical equipments were under the supervision of the company's surveyor, Mr. Leonard Voisey, and the structural engineer was Mr. G. W. Costain.

The general contractors were Messrs. A. H. Guest, Ltd., Stourbridge, and the following were sub-contractors: Birmingham Concrete and Steel Co., reinforced concrete balcony, staircases and floors; Chas. Wade and Co., Birmingham, constructional steel; Bagley and Parker, Birmingham, heating; Baxter and Impey, Birmingham, electric services; Bryan's Adamanta Ltd., Birmingham, internal painting and fibrous plaster works; Dows Granolithic Co., Ltd., Birmingham, patent stone; J. S. Wright and Co., Birmingham, internal plumbing and gas fitting; Bigwood Bros., Birmingham, wrought-iron work; West Bromwich Casement Co., steel casements; Val de Travers, Ltd., asphalt; W. Turner and Co., King's Heath, Birmingham, seating; Oldakers, Ltd., Smethwick, canopy and paybox; Stourbridge Glazed Brick Co., glazed wall tiling; Binks and Co., Birmingham, sanitary fittings; Smith and Ansell, Birmingham, electric light fittings.

DESIGN AND INDUSTRIES ASSOCIATION

A JOINT meeting of the Design and Industries Association with the Anglo-Swedish Society was held on Tuesday evening, October 28, at No. 6, Queen-square, W.C. The Swedish Consul-General (Mr. E. G. Sahlin) presided.

In place of Mr. Howard Robertson, who was unable to be present, Mr. F. R. Yerbury delivered a lecture, illustrated by lantern slides, on Swedish Arts and Industries. Referring to the Stockholm Town Hall, the speaker said this had been conceived by Ostberg in 1913, and should not be judged by the standard of 1930. One found in it the gathered experience of a great mind. It was the last flower of the William Morris movement, and it was a glorious flower. It was the last word of the Arts and Crafts movement. What the architect had done was to revive the sense of craftsmanship in Sweden—not craftsmanship as we had understood the word, but a craftsmanship of the machine. It was a recognition of the possibility of having finely designed things made by machinery. One of the things that had struck him in Sweden was the use of fine sculpture in buildings, not in a detached way, but connected up with the building it was intended to decorate.

Of the Stockholm library, the lecturer said it was one of the most perfect pieces of work of its kind in Sweden. It was an example of functionalism, which was still new in Sweden. The first Exhibition after the War was that in 1923 at Gothenburg. It was modern, extremely functional, but completely characteristic of Sweden. As to the Stockholm Exhibition, many had gone there expecting to find something entirely new, but it merely repeated what had been done in Germany for years. Some years ago a committee had been established to improve design in everyday things, and this committee had decided to approach the people responsible for manufacture, and endeavour to enlist their sympathy in a movement for improving design. Good design should add nothing to the cost of a product when sold for everyday use. This committee had decided to recommend certain designers to certain manufacturers, but had laid it down that the designer should spend some time in the factory of the firm for which he was to design, so that he might learn about the material he was to work in. Excellent things were made in other countries than Sweden, but generally only for a small class: in Sweden, where the designer had been in the factory and learned the cheapest way to work in a particular material, one could buy things of fine design as cheap as they would be if badly designed. Ceramics were particularly successful, because they definitely retained their Swedish character. The Swedes were the most romantic nation on earth, but in the case of metal furniture there seemed to be an attempt to eliminate anything that had any sense of romance about it.

The Chairman said it was very fine to be functionalistic in the office, but not in the home. The home should not be made a laboratory. In their effort to make the home too efficient people had overreached themselves. Why should not there be inefficiency in the home? The idea of making a workshop of the home might apply to certain purely mechanical sides of the home such as the kitchen, but one should have one's living-room as one liked it.

Mr. P. Morton Shand said he had gone back to Stockholm this year for the first time since 1910, expecting to see wonderful things, but had failed to see them, except at the Exhibition and National Library. The first building to shock him was the Municipal Concert Hall. The Stadium was rather lamentable and arty-crafty. The Town Hall was full of beauties, but had no unity. It had a complete lack of cohesion, and seemed to have been erected as a Tennysonian palace of art. The worst feature about it was the sentimental one of incorporating the doorway of the old Town Hall. The slogan of the D.I.A. was fitness for purpose, but what fitness for what purpose could be found in the Stockholm Town Hall?

Mr. Pritchard said at this stage of modern design it was important we should have men like Le Corbusier and Ostberg to clear the ground, and do for architecture what Cubism had done for painting—get it straight again and set architects thinking along serious lines.

Mr. Hamilton Smith said it had become a fashion to pull the Stockholm Town Hall to pieces on account of its lack of unity. But what was unity? In a room where no two pieces of furniture had been designed by the same man or at the same time, one could find greater unity than in a room with a six-piece suite all turned out in one workshop. What had struck him most when visiting the Town Hall was a feeling of one controlling mind with one quite definite æsthetic outlook that had triumphantly succeeded in welding that great and complex building into one indivisible whole.

The Chairman said the Town Hall of Stockholm and the Exhibition had come into existence under democratic conditions. There was not a Town Council in Sweden that had not a Labour majority. Those were the men who had to vote money for municipal buildings, fountains, etc. With proper tuition what were called the common people might grow to like things of beauty and be ready to spend money on the aspect of their town.

GEOGRAPHY AND ARCHITECTURE

Sir Banister Fletcher, P.R.I.B.A., gave a lecture at the Central School of Arts and Crafts on Wednesday last on the Gothic architecture of Italy. Here, he said, were many and diverse influences in art at the beginning of the mediæval period. The classical remains in Italy preserved the Roman tradition in design and the Gothic style never took root there, except at Milan and other places in the north, where German influence was sometimes apparent. Again, Eastern influence via the Mediterranean Sea produced a Byzantine element. This resulted in a dual treatment, a quaint mingling of Gothic pinnacles and classic entablatures, which was the outstanding feature of Italian Gothic. The independence of the powerful Republics of Venice, Genoa and Florence, the power of the Duchy of Milan, and the rivalry of the free cities of the hills and the plains, all militated against any Italian unity, whether in art or policy. The lecturer described the charm of churches in which the dual treatment produced a result which, though not homogeneous, was harmonious.

He then gave an illustrated comparative analysis of the Gothic architecture of Italy, pointing out the many distinctive features, and described S. Petronio, Bologna, with its interesting unfinished front; SS. Giovanni e Paolo, Venice, a simple northern interpretation of Gothic, with its internal tiebeams in lieu of buttresses to resist outward thrust of arch and vault; the Certosa, or church of the Carthusian monastery, at Pavia, a remarkable example of brick, terra-cotta and marble architecture; and, lastly, that more typically Gothic and impressive Cathedral at Milan, described by Tennyson, as "A mount of marble, a hundred spires."

Society of British Artists.

The Royal Society of British Artists has instituted two medals, one in silver and one in bronze, to be awarded annually at the spring exhibition to the two best pictures by members. The award will be judged by an independent jury selected from outside the society. The medal is the work of Mr. C. L. J. Doman, who gained the commission in open competition.

THE WEEK IN PARLIAMENT

WESTMINSTER, *Wednesday.*

The Architects' Registration Bill.

The Architects' Registration Bill has been reintroduced this Session by Lt.-Col. Moore, the Unionist Member for Ayr Burghs. The Bill, however, is the last on the list, and, although it has been put down for second reading on Friday, November 7, it is not likely to be reached, as others are in front of it for that day. This will mean its indefinite postponement.

Slum Clearance.

Mr. Graham White asked for the number and scope of slum-clearance and rehousing schemes so far approved under the Housing Act, 1930.

Mr. Greenwood said he had received resolutions declaring eleven areas to be clearance areas, one clearance order and one compulsory purchase order. The number of persons occupying the eleven areas was approximately 5,400.

Shops on New Estates.

Mr. Louis Smith asked the Minister of Health if his attention had been called to the action of any municipalities in building shops on their new housing estates; whether his consent had been asked to this policy; if so, by what towns; and what had been his reply in every case.

Mr. Greenwood replied that Section 107 (1) of the Housing Act, 1925, empowered local authorities, with the consent of the Minister of Health, to provide and maintain shops on their housing estates. He regretted it was not readily possible to provide the information sought in the latter parts of the question.

Backward Local Authorities.

Mr. Ramsbotham asked the Minister of Health whether, in view of his determination, as announced, that local authorities should use the Wheatley Act of 1924 for housing purposes, he proposed to take any action which might detract from the independence of such local authorities in deciding on the needs of their respective districts; and, if so, of what nature.

Mr. Greenwood said he did not know to what specific announcement the hon. member referred. He (Mr. Greenwood) would, of course, propose, as his predecessors had done, to bring pressure to bear upon local authorities who were shown not to be endeavouring to meet the housing needs of their areas.

Imported Timber.

Mr. Gillett informed Brig.-Gen. Clifton Brown that the total imports of wood and timber into Great Britain and Northern Ireland registered as consigned from the Soviet Union (Russia) during the six months ended September 30, 1930, amounted to 133,800 cubic feet of hard wood and 1,782,900 loads of other sorts, as compared with 137,600 cubic feet and 1,284,700 loads during the corresponding period of 1929. The total declared value was £6,304,500 and £5,160,200 for the six months ended September, 1930 and 1929, respectively.

Rural Amenities.

Sir Hilton Young has presented a Bill to provide for the better preservation of rural amenities and objects of natural interest.

British Steelwork Association.

At the annual meeting of the British Steelwork Association, held on October 30, Mr. Arthur Dorman (joint managing director of Messrs. Dorman, Long & Co., Ltd.) was elected President, and Mr. J. H. Humphryes (chairman of directors of Messrs. Braithwaite & Co., Engineers, Ltd.) Vice-President for the coming year.

NOTES ON LONDON BUILDING ACT, 1930

By W. T. CRESWELL, Barrister-at-Law, Hon. A.R.I.B.A., Associate (late Fellow) of the Surveyors' Institution, etc.

III.—MAKING AND WIDENING OF STREETS.

Part II. of the Act deals with the making and widening of streets. This must now be carried out in strict conformity with this part of the Act.

A street includes "any highway, road, bridge, lane, mews, footway, square, court, alley, passage, whether a thoroughfare or not." It has been held that a passage serving a block of flats is *not* a street for foot traffic, and that "a street" need not be one intended for general public use.

In R. *v.* Fulwood (1864) 33 L.J.M.C. 122, it was held that a street is a road with houses on each side, and in Taylor *v.* Metropolitan Board of Works (1867) L.R. 2 Q.B. 213, it was said that one house is not sufficient, and that whether the intended houses are sufficiently numerous and continuous is a question of degree and a question of fact for the magistrate to determine. In Metropolitan Board of Works *v.* Nathan (1885) 50 J.P. 502, a case decided under the Metropolitan Building Act of 1855, it was held that there may be a place with houses on both sides, which is, nevertheless, not laid out as a street.

Under the Act of 1930 a street is said to be laid out when a fence or other boundary is erected, or when lines of kerbing are laid down, or the surface of the ground is levelled so as to define the course or direction of a roadway. Again, to form the foundations of a house so that such house is, or may become, one of three or more houses abutting on or erected beside land on which a street is intended to be, or may be, laid out or formed, also constitutes laying out a street in the meaning of the Act.

As to what amounts to commencing to form a street, in L.C.C. *v.* Davis (1904) 68 J.P. 520, it was held that various approaches to a bazaar from an existing footway, and from existing streets, each controlled by gates, nevertheless constituted "commencing to lay out a street."

In L.C.C. *v.* Collins (1905), 69 J.P. 401, there was a plot of land some 187 feet back from a proposed street, and a rough road ran over part of the land; the erection of buildings was commenced on the plot, a sewer was lengthened along the rough road, and fresh clinkers were placed upon this road. It was held that this did not constitute "commencing to form and lay out a street."

In L.C.C. *v.* King (1905) 69 J.P. 406, the respondent bought a plot of land abutting on a private road, some 1,200 feet in length, and 50 feet back from the road on one side of it, and built on his plot, a house. None of the soil of the private road was vested in him, he had only a right of way over it to his own plot. It was held that he had not "commenced to form and lay out a street" or "to adapt a way for carriage traffic."

In L.C.C. *v.* Dixon (1899) 1 Q.B. 496, it was held that where a builder commenced the erection of a shop and stables, but had no control over the soil, that was not the "commencement of a street."

Proposed Architectural Scheme, Exeter.

The question of maintaining the good appearance of buildings in the main streets of Exeter has come up at the City Council meeting on the Streets Committee report. The Deputy Mayor referred to improvements in High-street, and asked whether the committee were taking steps to provide that there should be good elevations for later buildings. The Council had a great opportunity now of dealing with two entrances to the city. Mr. C. Warren, chairman of the committee, said the committee had the matter under consideration, and would not allow "any kind" of building to be put up. Details had to be considered. He had already spoken to several prominent architects on the matter, and the committee would bring forward a scheme.

ARCHITECTS' & BUILDERS' INQUIRY BUREAU

We are glad to give questions and answers, but cannot accept responsibility for contributed replies, especially on legal matters.

May we appeal to our correspondents to submit their queries on paper of a size easily filed, and written as legibly as possible, or, better still, in typewriting!—ED.

Contract Question.

[REPLIES TO "BUILDER." OCTOBER 24.]

SIR,—Any special fitting should be specifically mentioned in the specification, and the contractor would appear to be entitled to charge an extra for such special fitting if not so provided against. CONTRACT.

SIR,—On the facts as stated, "Builder" would not appear to have a legal claim. But the architect, if satisfied that he has been misled through no fault of his own, might be prepared to make suitable representations to his client. J. R. T.

Civil Engineering Contracting.

[REPLIES TO "READER." OCTOBER 24.]

SIR,—If "Reader's" experience of general building contracting has been obtained on works of some size it should carry him through, provided he engages a competent general foreman familiar with the class of work now contemplated. He should not take on anything too big at first. ELLESMERE.

SIR,—Your correspondent can hardly hope to learn a new profession in his spare time, especially as he appears to be a busy man. The best thing he can do would appear to be to take in a partner properly qualified in the branches of construction in which he is anxious to practise. ADVICE.

[Other answers to this inquiry have been posted to our correspondent.—ED.]

Ancient Lights

[REPLY TO "YOUNG ARCHITECT," OCTOBER 31.]

SIR,—There is no fixed test as to the amount of light to which a dominant owner is entitled. The fact that, as appears in the sketch, an angle of 45 degrees will be left when the building is raised, is a small element in the matter which can only be used as a sort of test in arriving at a conclusive decision as to the amount that should, in fact, be left. It has been held that less than 45 degrees will suffice—but each case must be determined on its own merits. There is of course, here, not sufficient data given to apply any quantitative test. It may be (and indeed on the small amount of data given it appears so) the rule that sufficient light must be left as will satisfy the ordinary notions of mankind will be met when the building is raised. LIGHT.

Percentages.

[REPLY TO "EMPLOYER." OCTOBER 24.]

SIR,—15 per cent. down to 12½ per cent. would be a fair basis, according to the extent and nature of the work. I have known cases where works have been undertaken at an inclusive 10 per cent. on prime cost, apparently to the satisfaction of the contractor, but the range I have suggested is more usual. I believe there is no standard for this kind of contract, though the Office of Works and other public bodies use a form of their own which is comprehensive and suitable for similar contracts. I do not think, however, these forms are published for public use. PRACTICE.

Maintenance.

[REPLY TO "CONTRACTOR." OCTOBER 24.]

SIR,—I should say that unless a contractor has been allowed access to works for the purpose of fulfilling his maintenance obligations under a building contract within three weeks of demand, he would have a good case for claiming that reasonable access had been refused him. In any case he can refuse to do any maintenance work which involves what would ordinarily be the outcome of the ordinary wear and tear of a house, if such work has become necessary after the maintenance period laid down in the contract, so that if there is any conspiracy to delay his work on such account the aim would appear to defeat itself. MAINTENANCE.

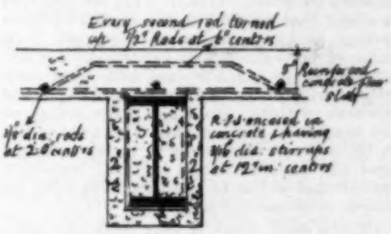
Question of Specification.

[REPLY TO "READER," OCTOBER 31.]

SIR,—A perusal of the documents forming the contract is required to deal effectually with the question raised; but, on the facts stated, it may be said that "Reader" is not precluded from bringing an action to recover damages for what has, in fact, occurred, merely for the reason that the work was carried out, and paid for, some five years ago. DATA.

Beam Construction.

SIR,—The accompanying sketch illustrates a type of beam used in the construction of a new building. The R.S.J. is encased in concrete and has ⅜ in. dia. stirrups at 12 in.


Every second rod turned up
Rods at 6" centres
Ramps and cranks as floor plan
R.S.J. encased in concrete showing
⅜ dia. stirrups at 12" centres

centres, the whole carrying a reinforced concrete slab floor. Am I correct in assuming that since the steel joist is encased in concrete the effective carrying power of the joist is increased at least by ⅓? QUERY.

Toning Down New Tiles.

SIR,—A client is dissatisfied with the newness of a roof we have just tiled with red hand-made, sand-faced tiles. Can you advise us of the best method of toning down the newness of the tiles and to hasten the process of vegetation? BUILDERS.

Sound Insulation.

SIR,—A recently-built house has good floors and ceilings, but sound rises from dining room and kitchen to the two rooms above, where reasonable quiet is desirable. Central heating is installed, and I am not sure whether the radiators and pipes are to any extent responsible for this trouble. I should be glad to have suggestions for a remedy. J. W.

Cost of Houses.

SIR,—Would you let us know the average cost of small parlour and non-parlour type houses, during the period of 1920-1921; also the periods 1929-1930?

[Following are the particulars required:—

1920-1921.

Period ending.	Small parlour. £	Non-parlour. £
March, 1920 ...	911	804
June, 1920 ...	947	843
Sept., 1920 ...	954	875
Dec., 1920 ...	955	866
March, 1921 ...	891	814

1929-1930.

Period ending.	Small parlour. £	Non-parlour. £
March, 1929 ...	413	339
June, 1929 ...	404	349
Sept., 1929 ...	406	343
Dec., 1929 ...	417	349
March, 1930 ...	418	335

These figures are exclusive of cost of land and development.—ED.]

THE BUILDING TRADE

RECURRING DEFECTS: THEIR CAUSE, PREVENTION AND CURE.—XVIII

By J. R. TAYLOR.

INCOMPLETE DIAGNOSIS.

The Building Research Station is doing very valuable work, and the thanks of all connected with the building industry are due to this very able body of experts. But I am a little inclined to believe that even better results would follow if the reasons for the published conclusions were stated at greater length and the exceptions stated also. In the absence of such qualifications there appears to me to be some danger of our being stampeded into abandoning some traditional methods that have stood the test of time.

To quote an instance:—It would not be unnatural to conclude from the advice given to an inquirer to the effect that he should strip away some torching from the underside of a tiled roof to prevent water entering and finding a continuous capillary path, that torching stood condemned. I am not prepared to argue that torching is the ideal method as applied to either slates or tiles, but I do know of houses built on exposed sites without shelter on any side and with tiled roofs fully tiered or torched which, though laid upwards of thirty years ago, have not given any trouble on this account. The roofs appear to be in every way as sound to-day as at the time the architect made his final inspection except that a few of the tiles have been replaced on account of breakage.

On the other hand, I have been into many roof spaces and found that large quantities of the tiering mortar have fallen from the underside of both slates and tiles and not always been renewed. In most instances where the renewal has not been carried out the reason has been that, the roof being in a sheltered position, the fallen mortar has not attracted much notice. In less sheltered positions renewals have generally been made.

The Value of Tiering.

It is very difficult to get a house absolutely weather proof when it is built in an exposed position, as, for instance, on the Welsh hills. A small house of the semi-bungalow type was built in 1908 by a good-class builder under the direction of architects of repute. The roof, pitched at 45 deg. (square pitch), was covered with plain roofing tiles, machine made, of good quality and burned to the point at which they came out as brindled. They were laid to a four-inch gauge and half tiered on the underside with hot lime and sand. Towards the end of the winter of 1909-10 a fierce blizzard caused a good deal of damage to roofs in that district, but though nothing was actually disturbed on the roof I am describing, very fine dry snow was blown into the roof space and on to the ceilings, where it melted and dripped through.

An examination of the exterior of the roof failed to show a single tile broken, slipped or missing, and, looked at from inside, everything appeared to be quite sound. I came to the conclusion that the fine dry powdery snow must have been driven up over the lap and out at the vertical joints above the half torching. The owner was recommended to have full torching or tiering carried out, and this being done no further trouble of this sort has since been experienced. It seems to me that as fine snow may be driven into a roof space in this way, it is quite possible that rain can also be driven in. At all events, in a similarly exposed position I should not care to advise the stripping of tiering without substituting something else for it. Some of the softer makes of tiles may, of course, when subjected to prolonged wind-driven rain, become saturated. Such tiles, to be quite safe, should be laid on counter-lathed felted and boarded roofs.

Repointing in Cement Mortar.

Another point on which further research appears to be desirable is the effect of repointing on brickwork. An illustration issued by the Research Station with regard to their experiments in this connection affords striking confirmation of the view taken as to the damage that may follow when brickwork laid in lime mortar is repointed in cement. But the following facts go far to prove that this does not apply to all brickwork.

A barracks built in 1875-76 has had numerous additions made to it at short intervals ever since. The bricks used are of different kinds and include local wirecuts, Ruabon pressed, Ruabon wirecut, Ruabon blue pressed and wirecuts, Staffordshire blue pressed and wirecuts, a few Staffordshire whites and buffs. The original mortar was probably hand-made, with chalk lime for the most part, but with cement in some foundations. Since then, hand-made with chalk and lias limes have both been used, also machine-ground mortar with clinker and sand. The sand has always been pit sand. For the last thirty years a certain amount of repointing has been carried out yearly, and in some years in considerable quantities. Till quite recently this repointing was done with cement mortar, either grey or black. H.M. War Department schedule has an item of "Cut out and replace defective single bricks in repairs," which operation is usually performed when repointing is being carried out. It has also an item for a similar repair in patches of from three to seven bricks. Except in boundary walls built without a dampcourse, and where copings have not been promptly attended to, the second item has seldom arisen. The single brick item shows up oftener, but not more frequently than is normal to most brickwork. As repointing is not unduly delayed, the brickwork in the buildings, old and not so old, continues to be in very good condition, and this though the barracks are isolated and on a hill, where conditions are very bleak. The Royal Engineers, however, are evidently of opinion that there is something in this question, because a standing order has lately come into operation and brickwork built in lime mortar is now to be repointed in lime; if built in cement, then in cement.

Stone Window Cill damaged by birds.

A school built shortly before the War in the same locality has local pressed facings from a reputable yard. They were laid in mill-ground lime mortar, weather-pointed as the work proceeded. They have not yet been repointed, and though they have now reached a stage where repointing is needed, the mortar has stood very well; but there are patches of considerable area, particularly in the gables, where the faces of the bricks have flaked off to a depth of from ¼ in. to ½ in. This is a trouble that does not occur regularly with these bricks, but it occurs sufficiently often as not to escape notice. In the case of boundary walls built without dampcourse, whether repointed in cement or lime, or not repointed at all, bricks from which the faces have crumpled away, singly and in patches, are very frequently met with. All classes of bricks seem to suffer from it, not even the hard blue entirely escaping, though naturally the latter offer a more prolonged resistance. I consider that a dampcourse is necessary for all brick boundary walling and that the addition of a second under the coping would more than justify the additional cost.

The Housebreakers.

Some time ago I came across a curious case of damage to brick and stonework that puzzled me. The accompanying illustration is from a photograph of a window that I passed almost daily for over a year. The stone cill and some of the brickwork appeared to have become badly perished, and in seeking a cause I was perplexed by the fact that an exactly similar window only a few feet away had not suffered. One morning I noted on the damaged sill some sparrows who, on my closer approach, flew away into the ivy covering a house near by. Quite a number of birds from this ivy and from other places visited the cill and flew away again. I satisfied myself that although partly in search of insects, their constant visits were mainly made in an attack on the stone, the bricks and the lime mortar. I came to the conclusion that they wanted these materials partly for digestive purposes, and also for eggshell-forming and colouring. Poultry-keeping friends tell me that this view is correct. The window, not having much importance, was taken out and the cill removed and the opening bricked up. The birds did not transfer their efforts to the adjoining window, but I have, however, located their new quarry about a hundred feet away.

Frost.

Brick and stone damage is in many cases the result of frost. Most builders will have noted in new work instances where a sudden frost has not only pulled out the pointing (which is frequent), but has damaged the face of the bricks (infrequent). But although the damage to the face of the bricks is not in new work so frequent as to attract wide attention, it is very extensive later on, and in many cases is seeded into the new work for want of sufficient care. When it is remembered that in dry climates brickwork has lasted for hundreds and perhaps thousands of years, it is suggested that what is most wanted in this country is better weather resistance. In respect to this it would be interesting and instructive to have the Research Station's observations on the feasibility of applying some of the colourless water-proofing liquids to brickwork soon after building, and if necessary renewing the applications at definite intervals. My own observations lead me to believe that the necessity for repointing would by this means be much delayed. Such liquids can usually be applied from a ladder, whereas pointing generally necessitates the erection of scaffolding. Carried out at the same time as the periodical external painting the work could be done very economically. The recommendation to the architect is that he may still retain the qualities of colour and texture and yet get the advantages of a non-porous brick suitable for using with impermeable mortar. A great many years ago there was a project for making bricks waterproof by a pressure or vacuum process conducted on similar lines to those at that time applied in making artificial stone, but I do not know if it ever reached production scale.

Inferior Workmanship.

It cannot be denied that much of the want of resistance to wind-driven rain in ordinary one-brick walling is due to bad work. It is only by very determined supervision that

many bricklayers can be got to fill the vertical joints properly. The corners are "buttered" and the bricks laid side by side in such a way that in the case of a header fully two-thirds of the joint will have no mortar in it except the little that squeezes down when the next course is laid. With the regular, uniform, pressed facing brick much work is done with a very thin joint, which makes repointing difficult to carry out, because the raking-out tool is liable to damage the arrises if a proper depth is taken. Nor can the water which it is necessary to introduce in order to secure adhesion be easily got in, and this results in much of the work done having little value as a protection to the inside of the wall.

Difficult as it is to get solid mortar joints, it is perhaps even more so to get the bricks sufficiently wetted to insure strong adhesion. A wet brick is not so easily laid as a dry brick, and it is not every bricklayer who realises the harmful effects of want of attention to this matter. For the results of dry laying to be fully appreciated I know of nothing better than visits to jobs where demolition is in progress. If the walls being pulled down are very soundly built, the mortar will adhere so tightly as to make cleaning too costly to be worth while. But if the bricks (as they frequently do) shake off nearly all the mortar as they fall one may be sure that they were not wetted when laid.

(*To be continued.*)

INSTITUTE OF FUEL

Sir Dugald Mean-Watson, in his presidential address to the members of the Institute of Fuel, at their annual conference, held at the Incorporated Accountants' Hall, Victoria Embankment, W.C., recently, referred to the future of smokeless fuel. Several low temperature processes, he said, were being operated in various parts of the country. The successful treatment of coal by low temperatures was now understood. On the financial side plants which could secure good stock at low prices and sell the coke at good prices could show a profit. Other plants at a distance from the coalfields could not find sufficient margin to meet operating expenses. There was a market for low temperature gas and coke, but the oils had proved disappointing in quality and value, as also had ammonia. The perfecting of cracking or hydrogenation processes to improve these oils was awaited. Until this could be achieved successfully on a commercial basis and the consumer of smokeless fuel had to pay no more than his air-polluting neighbour, there was no hopeful future for any low temperature process principally devised to make smokeless fuel. It was more probable that the smokeless fuel of the future would be prepared from selected, prepared, and blended coals by high temperature processes.

The proper organisation of the carbonising industries could produce 12 per cent. of the motor spirit and 25 per cent. of other imported oils. It was necessary that the production of such oils be modified and controlled to produce the required properties. In the past too much attention had been given to oils resulting from carbonisation without reference to their having the desired properties. It was a matter for congratulation that the Admiralty were making trials of home-produced oils and other large users should follow suit.

The development of the National Electricity Scheme had directed public attention to this aspect of national fuel utilisation. There had been a creditable fall in the coal used per unit generated. Losses in generation and transmission, however, resulted in the consumer receiving only 10 per cent. of the heat in the coal consumed last year. Where private power generation was as efficient as public generation, the transmission losses were eliminated. Where equal efficiency of generation was unattainable, it was desirable that privately owned power plants should be replaced by supplies from the public mains.

Heat, light and power were such essential services in the home and in industry that any threatened increase in their cost must be accompanied by the keenest endeavour to counter-balance such an evil. It was necessary at the present time to produce a co-ordinated national fuel policy.

PUMICE-CONCRETE BUILDING MATERIAL

Although it is a comparatively recent innovation in this country, pumice concrete has for many years been extensively used on the Continent, particularly in Germany, where large deposits of raw material are available. The centre of the German pumice concrete industry is the Neuwied district of the middle Rhine, covering an area of about 150 square miles.

The material is of volcanic origin, and is found in the same formation as an ordinary gravel pit. That is, the pieces range in size from about ¼-in. down. The raw material is light in weight (about 40-45 lb. per cu. ft., compared with about 120 lb. per cu. ft. for sand). The structure of the grains is cellular, which not only makes concrete made with it highly resistant to changes of temperature and to the conductivity of sound, but also tends to prevent the percolation of moisture due to the innumerable small voids across which moisture does not readily pass.

Within the past few years quantities of this material have been imported into England, and considerable progress has been made with its application to constructional work. Pre-cast slabs made with pumice aggregate have been used in some important new buildings in London and elsewhere, including the reconstruction of the Bank of England and hotels and high-class residential flats in the West End of London.

It is claimed that the good key, the material presents for plastering, its heat and sound insulating properties, and the economies it makes possible in structural members, which may be reduced in section due to the light superstructure, render this new material particularly valuable for all classes of building. Nails and screws can be driven into pumice concrete as easily as into wood and hold as firmly, while the slabs can be cut with a saw or an axe. We understand that on the Continent door hinges are commonly screwed to pumice concrete walls without the use of door frames.

As it reaches this country the pumice generally ranges in size from ¼ in. down, with some pieces up to about ¾ in., and with no very fine grains. The absence of "fines" results in a concrete that is naturally cellular due to the presence of voids between the particles of pumice. The weight of pumice concrete varies according to the grading of the raw material and the proportion of cement used, but it averages from 80 to 90 lb. per cu. ft.; an ordinary standard size brick (9½ in. by 4½ in. by 2½ in.) weighs about 2¼ lb., while a partition slab 24 in. by 12 in. by 2½ in. weighs about 25 lb., and a 3-in. slab 30 lb. We have before us a publication giving results of tests by official organisations that show the fire-resisting properties of pumice concrete, which has been successfully subjected to numerous tests and is therefore recommended for fire-resisting construction. On the Continent the material is not limited to interior work, but is used for external walling for all kinds of buildings, generally without rendering, the cellular nature of concrete is sufficient to prevent rain penetrating. [illegible] Time is not stated [illegible] water was found to be [illegible] slabs after three days, while a sixth brick tested at the same time and placed on edge in the same tank was found to be completely saturated and a sand-lime brick was saturated to a height of 6 in. above water level. When wet the material becomes darker in colour, resuming its normal light-grey colour on drying out.

The machine that is being largely used for pumice-stone products makes at one operation 12 bricks, two slabs, or four hollow blocks 12 in. by 9 in. by 9 in., with the labour of three men and a boy. It has an hourly output of 2,000 bricks, 250 slabs, or 300 hollow blocks, and is driven by a 25 h.p. electric motor.

SAVING TIME IN BUILDING

Rumours have been in circulation in the Press during the last week to the effect that in view of the decision of the National Federation of Building Trades Operatives to withdraw from the present agreement in March next, London and certain provincial employers have agreed to the adoption of a system in the building industry of payment by results and intend to press for its inclusion in any new agreement which may be negotiated with the operatives next year.

Upon inquiry at the London Master Builders' Association and the National Federation of Building Trades Employers, it was learnt that these reports may be in some respects misleading.

Mr. E. J. Brown, director of the L.M.B.A., informed a representative of *The Builder* that there was no special reason for such a report at the present time. At various times since the War the subject had been brought up, and some years ago the National Federation of Building Trades Employers made it known that, provided it were on a fair basis and there was no exploitation of wages, any system of payment by results (i.e., payment at the standard hourly rate, plus a bonus or commission on the job) that might be put into effect by any of its members would have the Federation's full support. Unfortunately, no standardised system had yet been evolved, although in individual cases advantages of such an scheme commended itself highly to the contract. The system, however, in some specialised instances was in operation, and successfully. It was also applicable to certain branches of the industry, notably joinery and other repetitive work. It was, however, incorrect to say that a special scheme was now in course of being set in motion that at any other period during the last dozen years. When approached to do so model was an option for piece-work operations any scheme found suitable in the circumstances, while preserving fixed rates.

An official at the National Federation confirmed that the relating of wages to output would be in the best interests of the building industry, but it was important to make clear that the principles of piece-work were not necessarily involved. A scheme had been employed on certain buildings where bonuses of upwards of 30 per cent. represented a considerably high rate of output, during that time they were paid standard rates of pay, with a bonus on results, made possible by the saving in cost through speedier erection. For several years it had been hoped by employers that costs could be lowered by relating wages to the results attained. This attitude has not just arisen from the operatives' notice to retire from the joint agreement, but it may well be that, if that notice is placing all the present arrangements in the melting-pot, the question of finding premium or methods of payment related to results achieved will need to receive consideration, whether nationally or for [illegible] appear to work in the various districts.

THE BUILDING TRADE

RECURRING DEFECTS: THEIR CAUSE, PREVENTION AND CURE.—XVIII

By J. R. TAYLOR.

INCOMPLETE DIAGNOSIS.

The Building Research Station is doing very valuable work, and the thanks of all connected with the building industry are due to this very able body of experts. But I am a little inclined to believe that even better results would follow if the reasons for the published conclusions were stated at greater length and the exceptions stated also. In the absence of such qualifications there appears to me to be some danger of our being stampeded into abandoning some traditional methods that have stood the test of time.

To quote an instance:—It would not be unnatural to conclude from the advice given to an inquirer to the effect that he should strip away some torching from the underside of a tiled roof to prevent water entering and finding a continuous capillary path, that torching stood condemned. I am not prepared to argue that torching is the ideal method as applied to either slates or tiles, but I do know of houses built on exposed sites without shelter on any side and with tiled roofs fully tiered or torched which, though laid upwards of thirty years ago, have not given any trouble on this account. The roofs appear to be in every way as sound to-day as at the time the architect made his final inspection except that a few of the tiles have been replaced on account of breakage.

On the other hand, I have been into many roof spaces and found that large quantities of the tiering mortar have fallen from the underside of both slates and tiles and not always been renewed. In most instances where the renewal has not been carried out the reason has been that, the roof being in a sheltered position, the fallen mortar has not attracted much notice. In less sheltered positions renewals have generally been made.

The Value of Tiering.

It is very difficult to get a house absolutely weather proof when it is built in an exposed position, as, for instance, on the Welsh hills. A small house of the semi-bungalow type was built in 1908 by a good-class builder under the direction of architects of repute. The roof, pitched at 45 deg. (square pitch), was covered with plain roofing tiles, machine made, of good quality and burned to the point at which they came out as brindled. They were laid to a four-inch gauge and half tiered on the underside with hot lime and sand. Towards the end of the winter of 1909-10 a fierce blizzard caused a good deal of damage to roofs in that district, but though nothing was actually disturbed on the roof I am describing, very fine dry snow was blown into the roof space and on to the ceilings, where it melted and dripped through.

An examination of the exterior of the roof failed to show a single tile broken, slipped or missing, and, looked at from inside, everything appeared to be quite sound. I came to the conclusion that the fine dry powdery snow must have been driven up over the lap and out at the vertical joints above the half torching. The owner was recommended to have full torching or tiering carried out, and this being done no further trouble of this sort has since been experienced. It seems to me that as fine snow may be driven into a roof space in this way, it is quite possible that rain can also be driven in. At all events, in a similarly exposed position I should not care to advise the stripping of tiering without substituting something else for it. Some of the softer makes of tiles may, of course, when subjected to prolonged wind-driven rain, become saturated. Such tiles, to be quite safe, should be laid on counter-lathed felted and boarded roofs.

Repointing in Cement Mortar.

Another point on which further research appears to be desirable is the effect of repointing on brickwork. An illustration issued by the Research Station with regard to their experiments in this connection affords striking confirmation of the view taken as to the damage that may follow when brickwork laid in lime mortar is repointed in cement. But the following facts go far to prove that this does not apply to all brickwork.

A barracks built in 1875-76 has had numerous additions made to it at short intervals ever since. The bricks used are of different kinds and include local wirecuts, Ruabon pressed, Ruabon wirecut, Ruabon blue pressed and wirecuts, Staffordshire blue pressed and wirecuts, a few Staffordshire whites and buffs. The original mortar was probably hand-made, with chalk lime for the most part, but with cement in some foundations. Since then, hand-made with chalk and lias limes have both been used, also machine-ground mortar with clinker and sand. The sand has always been pit sand. For the last thirty years a certain amount of repointing has been carried out yearly, and in some years in considerable quantities. Till quite recently this repointing was done with cement mortar, either grey or black. H.M. War Department schedule has an item of "Cut out and replace defective single bricks in repairs," which operation is usually performed when repointing is being carried out. It has also an item for a similar repair in patches of from three to seven bricks. Except in boundary walls built without a dampcourse, and where copings have not been promptly attended to, the second item has seldom arisen. The single brick item shows up oftener, but not more frequently than is normal to most brickwork. As repointing is not unduly delayed, the brickwork in the buildings, old and not so old, continues to be in very good condition, and this though the barracks are isolated and on a hill, where conditions are very bleak. The Royal Engineers, however, are evidently of opinion that there is something in this question, because a standing order has lately come into operation and brickwork built in lime mortar is now to be repointed in lime; if built in cement, then in cement.

Stone Window Cill damaged by birds.

A school built shortly before the War in the same locality has local pressed facings from a reputable yard. They were laid in mill-ground lime mortar, weather-pointed as the work proceeded. They have not yet been repointed, and though they have now reached a stage where repointing is needed, the mortar has stood very well; but there are patches of considerable area, particularly in the gables, where the faces of the bricks have flaked off to a depth of from ¼ in. to ½ in. This is a trouble that does not occur regularly with these bricks, but it occurs sufficiently often as not to escape notice. In the case of boundary walls built without dampcourse, whether repointed in cement or lime, or not repointed at all, bricks from which the faces have crumpled away, singly and in patches, are very frequently met with. All classes of bricks seem to suffer from it, not even the hard blue entirely escaping, though naturally the latter offer a more prolonged resistance. I consider that a dampcourse is necessary for all brick boundary walling and that the addition of a second under the coping would more than justify the additional cost.

The Housebreakers.

Some time ago I came across a curious case of damage to brick and stonework that puzzled me. The accompanying illustration is from a photograph of a window that I passed almost daily for over a year. The stone cill and some of the brickwork appeared to have become badly perished, and in seeking a cause I was perplexed by the fact that an exactly similar window only a few feet away had not suffered. One morning I noted on the damaged sill some sparrows who, on my closer approach, flew away into the ivy covering a house near by. Quite a number of birds from this ivy and from other places visited the cill and flew away again. I satisfied myself that although partly in search of insects, their constant visits were mainly made in an attack on the stone, the bricks and the lime mortar. I came to the conclusion that they wanted these materials partly for digestive purposes, and also for eggshell-forming and colouring. Poultry-keeping friends tell me that this view is correct. The window, not having much importance, was taken out and the cill removed and the opening bricked up. The birds did not transfer their efforts to the adjoining window, but I have, however, located their new quarry about a hundred feet away.

Frost.

Brick and stone damage is in many cases the result of frost. Most builders will have noted in new work instances where a sudden frost has not only pulled out the pointing (which is frequent), but has damaged the face of the bricks (infrequent). But although the damage to the face of the bricks is not in new work so frequent as to attract wide attention, it is very extensive later on, and in many cases is seeded into the new work for want of sufficient care. When it is remembered that in dry climates brickwork has lasted for hundreds and perhaps thousands of years, it is suggested that what is most wanted in this country is better weather resistance. In respect to this it would be interesting and instructive to have the Research Station's observations on the feasibility of applying some of the colourless water-proofing liquids to brickwork soon after building, and if necessary renewing the applications at definite intervals. My own observations lead me to believe that the necessity for repointing would by this means be much delayed. Such liquids can usually be applied from a ladder, whereas pointing generally necessitates the erection of scaffolding. Carried out at the same time as the periodical external painting the work could be done very economically. The recommendation to the architect is that he may still retain the qualities of colour and texture and yet get the advantages of a non-porous brick suitable for using with impermeable mortar. A great many years ago there was a project for making bricks waterproof by a pressure or vacuum process conducted on similar lines to those at that time applied in making artificial stone, but I do not know if it ever reached production scale.

Inferior Workmanship.

It cannot be denied that much of the want of resistance to wind-driven rain in ordinary one-brick walling is due to bad work. It is only by very determined supervision that

many bricklayers can be got to fill the vertical joints properly. The corners are "buttered" and the bricks laid side by side in such a way that in the case of a header fully two-thirds of the joint will have no mortar in it except the little that squeezes down when the next course is laid. With the regular, uniform, pressed facing brick much work is done with a very thin joint, which makes repointing difficult to carry out, because the raking-out tool is liable to damage the arrises if a proper depth is taken. Nor can the water which it is necessary to introduce in order to secure adhesion be easily got in, and this results in much of the work done having little value as a protection to the inside of the wall.

Difficult as it is to get solid mortar joints, it is perhaps even more so to get the bricks sufficiently wetted to insure strong adhesion. A wet brick is not so easily laid as a dry brick, and it is not every bricklayer who realises the harmful effects of want of attention to this matter. For the results of dry laying to be fully appreciated I know of nothing better than visits to jobs where demolition is in progress. If the walls being pulled down are very soundly built, the mortar will adhere so tightly as to make cleaning too costly to be worth while. But if the bricks (as they frequently do) shake off nearly all the mortar as they fall one may be sure that they were not wetted when laid.

(To be continued.)

INSTITUTE OF FUEL

Sir David Milne-Watson, in his presidential address to the members of the Institute of Fuel, at their annual conference, held at the Incorporated Accountants' Hall, Victoria Embankment, W.C., recently, referred to the future of smokeless fuel. Several low temperature processes, he said, were being operated in various parts of the country. The successful treatment of coal by low temperatures was now understood. On the financial side plants which could secure good slack at low prices and sell the coke at good prices could show a profit. Other plants at a distance from the coalfields could not find sufficient margin to meet operating expenses. There was a market for low temperature gas and coke, but the oils had proved disappointing in quality and value, as also had ammonia. The perfecting of cracking or hydrogenation processes to improve these oils was awaited. Until this could be achieved successfully on a commercial basis and the consumer of smokeless fuel had to pay no more than his air-polluting neighbour, there was no hopeful future for any low temperature process principally devised to make smokeless fuel. It was more probable that the smokeless fuel of the future would be prepared from selected, prepared, and blended coals by high temperature processes.

The proper organisation of the carbonising industries could produce 12 per cent. of the motor spirit and 25 per cent. of other imported oils. It was necessary that the production of such oils be modified and controlled to produce the required properties. In the past too much attention had been given to oils resulting from carbonisation without reference to their having the desired properties. It was a matter for congratulation that the Admiralty were making trials of home-produced oils and other large users should follow suit.

The development of the National Electricity Scheme had directed public attention to this aspect of national fuel utilisation. There had been a creditable fall in the coal used per unit generated. Losses in generation and transmission, however, resulted in the consumer receiving only 10 per cent. of the heat in the coal consumed last year. Where private power generation was as efficient as public generation, the transmission losses were eliminated. Where equal efficiency of generation was unattainable, it was desirable that privately owned power plants should be replaced by supplies from the public mains.

Heat, light and power were such essential services in the home and in industry that any threatened increase in their cost must be accompanied by the keenest endeavour to counter-balance such an evil. It was necessary at the present time to produce a co-ordinated national fuel policy.

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Although it is a comparatively recent innovation in this country, pumice concrete has for many years been extensively used on the Continent, particularly in Germany, where large deposits of raw material are available. The centre of the German pumice concrete industry is the Neuwied district of the middle Rhine, covering an area of about 150 square miles.

The material is of volcanic origin, and is found in the same formation as an ordinary gravel pit. That is, the pieces range in size from about ¼-in. down. The raw material is light in weight (about 40-45 lb. per cu. ft., compared with about 120 lb. per cu. ft. for sand). The structure of the grains is cellular, which not only makes concrete made with it highly resistant to changes of temperature and to the conductivity of sound, but also tends to prevent the percolation of moisture due to the innumerable small voids across which moisture does not readily pass.

Within the past few years quantities of this material have been imported into England, and considerable progress has been made with its application to constructional work. Pre-cast slabs made with pumice aggregate have been used in some important new buildings in London and elsewhere, including the reconstruction of the Bank of England and hotels and high-class residential flats in the West End of London.

It is claimed that the good key the material presents for plastering, its heat and sound insulating properties, and the economies it makes possible in structural members, which may be reduced in section due to the light superstructure, render this new material particularly valuable for all classes of building. Nails and screws can be driven into pumice concrete as easily as into wood and hold as firmly, while the slabs can be cut with a saw or an axe. We understand that on the Continent door hinges are commonly screwed to pumice concrete walls without the use of door frames.

As it reaches this country the pumice generally ranges in size from ¾ in down, with some pieces up to about ¼ in., and with no very fine grains. The absence of "fines" results in a concrete that is in itself cellular due to the presence of voids between the particles of pumice. The weight of pumice concrete varies according to the grading of the raw material and the proportion of cement used, but it averages from 50 to 60 lb. per cu. ft.; an ordinary standard size brick (8¾ in. by 4¼ in. by 2¾ in.) weighs about 2¾ lb., while a partition slab 24 in. by 12 in. by 2½ in. weighs about 25 lb., and a 3-in. slab 28 lb. We have before us a publication giving results of tests by official organisations that show the fire-resisting properties of pumice concrete, which has been successfully subjected to numerous tests and is therefore recommended for fire-resisting construction. On the Continent the material is not limited to interior work, but is used for external walling for all kinds of buildings, generally without rendering; for although pumice concrete is cellular in structure water does not percolate through it to any great extent. Thus a test slab stood on edge in 2 in. of water was found to be saturated to 1¼ in. above water-level after three days, while a stock brick tested at the same time and stood on edge in the same tank was found to be completely saturated and a sand-lime brick was saturated to a height of 6 in. above water-level. When wet the material becomes darker in colour, resuming its normal light-grey colour on drying out.

The machine that is being largely used for pumice-stone products makes at one operation 18 bricks, two slabs, or four hollow blocks 13 in. by 9 in. by 9 in. with the labour of three men and a boy. It has an hourly output of 2,000 bricks, 250 slabs, or 240 hollow blocks, and is driven by a 15 h.p electric motor.

SAVING TIME IN BUILDING

Reports have been in circulation in the Press during the last week to the effect that in view of the decision of the National Federation of Building Trades Operatives to withdraw from the present agreement in March next, London and certain provincial employers have agreed to the adoption of a system in the building industry of payment by results and intend to press for its inclusion in any new agreement which may be negotiated with the operatives next year.

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Mr. E. J. Brown, director of the L.M.B.A., informed a representative of *The Builder* that there was no special reason for such a report at the present time. At various times since the War the subject had been brought up, and some years ago the National Federation of Building Trades' Employers made it known that, provided it were on a fair basis and there was no exploitation of wages, any system of payment by results (*i.e.*, payment at the standard hourly rate, plus a bonus on completion of the job), that might be put into effect by any of its members would have the Federation's full support. Unfortunately, no standardised system had yet been evolved, although the all-round advantages of such a scheme commended itself highly in the abstract. The system, however, in some specialised instances was in operation, and successfully. It was also applicable to certain branches of the industry, notably joinery and other repetitive work. It was, however, incorrect to say that a general scheme was any nearer being set in motion than at any other period during the last dozen years. What appeared to be needed was an option to put into operation any schemes found suitable in the circumstances, while preserving basic rates.

An official at the National Federation confirmed that the relating of wages to output would be in the best interests of the building industry, but it was important to make clear that the principles of piece-work were not necessarily involved. A scheme had been employed on certain buildings where teams of operatives in the various branches maintained a consistently high rate of output. During that time they were paid standard rates of pay, with a bonus on results, made possible by the saving in cost through speedier erection. For several years it had been urged by employers that costs could be lowered by relating wages to the results attained. This attitude has not just arisen from the operatives' notice to retire from the joint agreement, but it may well be that, if that notice results in placing all the present arrangements in the melting-pot, the question of making provision for methods of payment related to results achieved will need to receive consideration, whether nationally or (as the operatives appear to wish) in the various districts.

NEW BUILDINGS IN LONDON

The Editor would be glad to receive information for publication under this heading from architects, builders, or other persons concerned. Items should be received at THE BUILDER *Office not later than Tuesday evening.*

Barkham-terrace.—REBUILDING.—The rebuilding and extension of the Catholic Nursing Institute is being considered. The estimated cost of the scheme is £100,000.

Brixton.—EXTENSIONS.—Work has started upon a further section of the extension scheme for the Eighth Church of Christ Scientist in Acre-lane. The architects for the scheme are Messrs. Davidson, Son & Sherwood, 14, Rectory-drive, Gosforth. The contractors are Messrs. T. H. Adamson & Sons, 145, High-street, Putney, S.W.15.

Brockley.—CHURCH.—Messrs. Wm. Harbrow, Ltd., 214, Rotherhithe New-road, S.E.16, are the builders for a new church upon a site on the south-eastern side of Brockley-grove, Brockley.

Bromley-by-Bow.—EXTENSIONS.—Messrs. W. Lusty & Sons are making further extensions to their Lloyd Loom Furniture factory. The contract has been given to Messrs. Croggon & Co., Ltd., Upper Thames-street. The architect is Mr. S. B. Caulfield, F.R.I.B.A., 15, Baker-street, W.1.

Broadesbury.—RECONSTRUCTION.—The "Broadesbury Arms" public-house at Canterbury-road is to be reconstructed and extended for Messrs. Watney, Combe, Reid and Co., Ltd., Stag Brewery, Westminster, S.W.1. Plans by the staff architect.

Camberwell.—REBUILDING.—The "Army and Navy" public-house at 26, Addington-square is to be rebuilt for the Wenlock Brewery Co., Ltd. Plans by Mr. Joseph Hill, F.R.I.B.A., 34, Gordon-square, W.C.1.

Charlton.—EXTENSIONS.—Mr. W. J. Gregory, 3, Victoria-street, S.W.1, has prepared plans for extensions at the Convent of the Oblates of the Assumption. The work is being carried out by the Compleat Construction Co., Ltd., 3, Victoria-street, S.W.1.

Cheapside.—DEMOLITION.—Work has recommenced upon demolition in connection with the proposed rebuilding of the British General Insurance Company's premises. The architects are Messrs. M. E. and O. H. Collins, 115, Old Broad-street, E.C.2.

Dagenham.—HOME.—The Essex County Nursing Association is to have a new training home at Fritzlands-lane. The architect is Mr. J. A. Minty, 92, Herman-hill, Wanstead, and the work is being carried out by Mr. A. E. Speed, South Woodford.

Deptford.—GARAGES.—For the erection of lock-up garages on the north side of Shardeloes-road, Mr. S. Stotesbury, of 33, Penerley-road, S.E.6, has submitted an application to the B.C., which has been approved.

Deptford.—PREMISES.—The London Electric Supply Corporation, Ltd., 25a, Cockspur-street, S.W.1, are to erect a building on the site of Nos. 20-24, Briant-street.

Deptford.—REBUILDING.—Messrs. Courage & Co., Ltd., Horsleydown, S.E.1, are to rebuild the "Robin Hood and Little John" public-house at Church-street. Plans by the staff architect, Mr. F. M. Kirkby.

Ealing.—HOUSES.—Messrs. G. Wimpey & Co., Ltd., builders, The Grove, Hammersmith, W.6, are erecting 24 houses in Claremont-road.

Ealing.—HOUSES.—Mr. J. P. Blake, of Bank House, High-street, Hounslow, is the architect for 36 houses in Long-drive for the British Dardelet Threadlock Corporation, Ltd.

Ealing.—VICARAGE.—Mr. C. A. Farey, A.R.I.B.A., 7, Bedford-square, W.C.1, is the architect for a new vicarage, Windmill-lane, for the London Diocesan Fund.

Elmer's End.—CHURCH.—Mr. H. Ibberson, F.R.I.B.A., 9, Old-square, Lincoln's Inn, W.C.2, has prepared plans for the erection of a new Congregational Church. The estimated cost is £4,000. Messrs. Andrews and Andrews, Barnmead-road, Beckenham, are the contractors.

Eltham.—SHOPS.—The Woolwich B.C. has approved an application submitted by Messrs. Sykes & Pomfret, of 6, Park-place, Eltham, for the erection in Eltham High-street of shops at Nos. 165, 167 and 169.

Fulham.—ALTERATIONS.—Messrs. G. Spencer and Co., 79, Gresham-street, E.C.2, are the architects for alterations to the Temperance Billiard Hall, Church-row. The building contract is with Messrs. Sims and Russell, Bloomburg-street, S.W.1.

Fulham.—REBUILDING.—Mr. Nowell Parr, F.R.I.B.A., 42, Cranley-gardens, S.W.7, is preparing plans for the rebuilding of the "Seven Stars" public-house. The owners are Messrs. Fuller, Smith and Turner, Griffin Brewery, W.4.

Hackney.—ALTERATIONS.—The L.C.C. has accepted the estimate of Messrs. C. P. Roberts & Co., Ltd., 31, High Holborn, W.C.1, for alterations to, and erection of a school-keeper's house at, Hackney Downs school. The estimated price is £7,547.

Hammersmith.—BUILDING.—The L.C.C. has approved an application for the erection of a one-story building at Atlanta Wharf, Upper Mall, Hammersmith, for Mr. T. H. Taylor.

Hampstead.—PREMISES.—A new public-house is to be erected in Fairfax-road for Messrs. Courage and Co., Ltd., Horsleydown, S.E.1. This house will be known as the "Britannia." Plans are being prepared by the company's staff.

Hendon.—HOUSES.—Messrs. Hilbery Chaplin, Ltd., of 4, Russell-parade, N.W.11, have prepared plans for 246 houses off Stag-lane. The work will be carried out by Mr. E. H. Andrews, 83, Balfour-road, Ilford.

Holloway.—GARAGE.—Plans have been prepared by Mr. A. H. Lester for a garage and petrol-filling station at Parkhurst-road for Flight Petroleum, Ltd. Messrs. Lester and Co., 47, Parkhurst-road, N.7, are the builders.

Paddington.—REMODELLING.—The L.C.C. has placed a contract with Messrs. J. & C. Bowyer, Ltd., Upper Norwood, S.E.19, at £17,547, for the remodelling of Droop-street school.

Pall Mall.—OFFICES.—Messrs. Prestige and Co., Ltd., 149, Grosvenor-road, S.W.1, have secured the main contract for the erection of a four-storied office block. The steel contract has been let to Messrs. Dorman, Long. Messrs. Romaine-Walker & Jenkins, 6, Old Bond-street, W., are the architects.

Paris Garden.—WAREHOUSE.—Messrs. J. Sainsbury, Ltd., provision merchants, of Stamford-street, S.E., propose erecting a warehouse on a site they have acquired.

Peckham.—HOUSING.—The L.C.C. are to spend £12,000 on the acquisition and clearance for rehousing purposes of the site at Peckham Park-road.

Putney.—ENLARGEMENT.—Huntingfield-road school is to be enlarged for the L.C.C., who have placed a contract with Messrs. W. H. Gaze & Sons, Ltd., of Kingston-on-Thames. The price for the work is £13,293.

Raynes Park.—FACTORY.—Messrs. Richardson and Gill, of 41, Russell-square, W.C.1, have been appointed by Messrs. Cooper's Mechanical Joints, Ltd., of Lower Kennington-lane, S.E.11, to prepare plans for a factory.

Richmond.—EXTENSIONS.—Messrs. Cropley Bros., Ltd., Epsom, have secured the contract for extensions at the Royal Hospital. Messrs. Brewer, Smith and Brewer, 11, The Green, Richmond, are the architects.

Richmond.—EXTENSIONS.—Richmond B.C. have appointed Mr. L. C. Veale, Oxford-street, W., to prepare quantities for extension to the Darrell-road school. The architects are Messrs. Swan, Norman and Clay, Clifford's Inn, Fleet-street, E.C.4.

Roehampton.—SCHOOL.—The L.C.C. Education Committee has decided upon a site in Crestway, Greenstead-gardens and Torwood-road, and fronting Torwood-road to Huntingfield-road, on the Roehampton estate for elementary education purposes.

St. Pancras.—PREMISES.—A garage and business premises are to be erected for Messrs. Nettlefold and Sons, Ltd., 163, Euston-road, N.W.1, at the corner of Mabledon-place and Flaxman-terrace. The architect is Mr. G. Vernon, A.R.I.B.A., of 19, Russell-square, W.C.

Tooting Bec-road.—REBUILDING.—The Catholic Church of St. Anselm is to be demolished and rebuilt on the same site. The estimated cost of the scheme is £14,000.

Twickenham.—PREMISES.—Messrs. Tamplin, automobile agents, 60, York-street, Twickenham, propose establishing premises on a site at the junction of King-street and Crossdeep. The architects are Messrs. Brewer, Smith and Brewer, of The Green, Richmond.

Wapping.—EXTENSIONS.—For extensions to the parish institute, the Rev. F. C. Pond has obtained from the L.C.C. land on the Prusom-street site.

Warren-street.—STATION.—Premises to be demolished in order to build the new Underground station at Warren-street include those of Messrs. F. Watts, at the corner of Tottenham Court-road and Euston-road. The plans will be prepared by Mr. S. A. Heaps, 55, The Broadway, Westminster, S.W.1.

NEW CINEMAS

Birmingham.—We learn that Messrs. C. Bryant and Sons, of Small Heath, Birmingham, are contractors for the new cinema in College-road, Perry Bar, for Messrs. Mayfair Cinemas, Ltd., and not as stated last week. The architect is Mr. Hurley Robinson, F.R.I.B.A., Cadogan Chambers, 6, Cherry-street, Birmingham, and the quantity surveyor Mr. Leonard Voisey, Temple Row, Birmingham.

Dumfries.—The architects for the new super-cinema in English-street, Dumfries, are Messrs. Gordon and Scrymgeour, 39, High-street, Dundee.

Lewisham.—The B.C. has passed plans for a cinema on a site on the northern side of Slaithwaite-road. The architects are Messrs. J. Stanley Beard and Clare, 103, Baker-street, W.1.

Renfrew.—Considerable extension to the Picture House, Renfrew, is proposed. The architects are Messrs. J. McKissack & Son, 68, West Regent-street, Glasgow.

School Schemes in West Riding.

The twenty-sixth annual report of the West Riding Education Committee, for the year ended March 31 last, involves proposals for dealing with three main problems: (1) The carrying out of as much of the scheme of permanent reorganisation as could be undertaken in three years; (2) provision for the increase in the total number of children in elementary schools if the school-leaving age is raised in 1931; and (3) provision for the temporary increase in the total number of children owing to the higher birth-rates in 1920-22. The total capital expenditure for elementary education involved in the three-years' programme was £1,248,075. Among the new schools to be built is one for the Upper Calder Valley, between Mytholmroyd and Luddenden Foot, which is to cost £30,000. In the sphere of secondary education the programme of development for 1930-33 included the provision of six new secondary school buildings and one hostel for boarders, and the improvement and extension of 16 schools, at a total estimated capital cost of £483,815 for the three years. Included in the 1930-33 programme also was the provision of three new technical institutes, one technical centre, one senior mining centre, and six junior mining centres, the extension and equipment of six technical institutes, and the equipment of 12 day schools for evening institute purposes, at a total estimated capital cost of £136,000, including £15,000 for minor improvements. The Education Architect is Mr. H. Wormald, County Hall, Wakefield.

RATES OF WAGES IN THE BUILDING TRADE

[Every endeavour is made to ensure accuracy, but we cannot be responsible for errors.]

	Masons.	Bricklayers.	Carpenters Joiners.	Plasterers.	Slaters.	Plumbers.	Painters.	Labourers.
Aberdare	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Accrington	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Aldershot	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11
Alfreton	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Alnwick	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Altrincham	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Ashford (Kent)	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11
Ashington	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Ashton-under-Lyne	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Aylsham	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11
Banbury	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Barnsley	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Barnstaple	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Barrow-in-Furness	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Barry	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Basingstoke	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Bath	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Bedford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Berwick	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Bexhill	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Birkenhead	1/8½	1/8½	1/8½	1/9½	1/8½	1/8½	1/8½	1/3½
Birmingham	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Bishop Auckland	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Blackburn	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Blackpool	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Bognor Regis	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11
Bolton	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Bournemouth	1/5½	1/6½	1/5½	1/5½	1/6½	1/5½	1/5½	1/1½
Bradford	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Bradford-on-Avon	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11
Braintree	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Brentwood	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/0
Bridgwater	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Bridlington	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Brighton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Bristol	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Bromsgrove	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Bromyard	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Bungay	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	11
Barnsley	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Burton-on-Trent	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Bury	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Buxton	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Cambridge	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Canterbury	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Cardiff	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Carlisle	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Chatham	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Chelmsford	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Cheltenham	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Chester	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Chesterfield	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Chorley	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Cirencester	1/4	1/4	1/4	1/4	1/4	1/4	1/3	1/0
Clacton	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Colchester	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Coventry	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Cranbrook	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	11
Crewe	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Cromer	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Darlington	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Deal	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Denbigh	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Derby	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Devizes	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11
Dewsbury	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Doncaster	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Dorchester	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/2½	11
Dorking	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Dovercourt	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Driffield	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Droitwich	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Dudley	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Durham	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Eastbourne	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
E.Glam. (Mid.Val.)	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Ely	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Exeter	1/6	1/6	1/6	1/6	1/6	1/6	1/5	1/1½
Exmouth	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Fakenham	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Felixstowe	1/5	1/5	1/5	1/5	1/5	1/5	1/4	1/0½
Folkestone	1/4	1/4	1/4	1/4	1/4	1/4	1/4	11½
Frome	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/2½	11½
Glossop	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Gloucester	1/6	1/6	1/6	1/6	1/6	1/6	1/5	1/1½
Godalming	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Goole	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Gosport	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Grantham	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Great Yarmouth	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Grimsby	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Guildford	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Halifax	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Harpenden	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Harrogate	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Hartlepools	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Harwich	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Hastings	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Hatfield	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Hednesford	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Hereford	1/5	1/5	1/5	1/5	1/5	1/5	1/3½	11
Herne Bay	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/5	1/0½
Hertford	1/5	1/5	1/5	1/5	1/5	1/5	1/4½	1/0½
Hitchin	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/5	1/0½
Hoddesdon	1/5	1/5	1/5	1/5	1/5	1/5	1/2½	11
Holt	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	1/7	1/2½
Huddersfield	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Hull	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Hunstanton	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Huntingdon	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Isle of Wight	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Ipswich	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Keighley	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Kettering	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Kidderminster	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
King's Lyn	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Lancaster	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½

	Masons.	Bricklayers.	Carpenters Joiners.	Plasterers.	Slaters.	Plumbers.	Painters.	Labourers.
Leamington Spa	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Leeds	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Leicester	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Leighton Buzzard	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11
Lichfield	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Lincoln	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Littlehampton	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Liverpool	1/8½	1/8½	1/8½	1/9½	1/8½	1/8½	1/8½	1/3½
Llandudno	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Llanelly	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
London:								
12 m. radius	1/8½	1/8½	1/8½	1/8½*	1/8½	1/8½	1/7½	1/3½
12-15 m. radius	1/8	1/8	1/8	1/8*	1/8	1/8	1/7	1/3
Loughborough	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Lowestoft	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Luton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Macclesfield	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Maidstone	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Malvern	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Manchester	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Mansfield	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Margate	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Market Harb'rough	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Matlock	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Melton Constable	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	11
Melton Mowbray	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2
Merthyr Tydfil	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Middlesbrough	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Newark	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Newbury	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Newcastle-on-Tyne	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Newcastle-ur-Lyme	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
New Forest	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Newmarket	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Newport, Mon.	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Northampton	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/1½
Norwich	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Nottingham	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Nuneaton	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Oakham	1/6	1/6	1/6	1/7	1/6	1/6	1/6	1/1½
Oldham	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Oxford	1/5½	1/5½	1/5½	1/6½	1/5½	1/5½	1/5½	1/1½
Paignton	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Peterborough	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Plymouth	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Pontypridd	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Portsmouth	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Preston	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Ramsgate	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Reading	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Redcar	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Redditch	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Reigate	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1½
Retford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Ripon	1/5½	1/5½	1/5½	1/7	1/7	1/7	1/7	1/2½
Rochdale	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Rochester	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Rugby	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Saffron Walden	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11
St. Albans	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
St. Helens	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Sawbridgeworth	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Saxmundham	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11
Scarborough	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Sevenoaks	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Sheffield	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Shrewsbury	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Sittingbourne	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11
Southampton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Southend-on-Sea	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Southport	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
South Shields	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Stevenage	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Stockport	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Stockton-on-Tees	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Stoke-on-Trent	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Stourbridge	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Stourport	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Stowmarket	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Stratford-on-Avon	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Stroud	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Sunderland	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Swaffham	1/2½	1/2½	1/7	1/2½	1/7	1/2½	1/7	11
Swansea	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Swindon	1/5	1/5	1/5	1/5	1/5	1/5	1/4	1/0½
Tamworth	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/1½
Taunton	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Thetford	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Torquay	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Totnes	1/5	1/5	1/5	1/5	1/5	1/5	1/4½	1/0½
Trowbridge	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Tunbridge Wells	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Uttoxeter	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Wakefield	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Walsall	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Walsden	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Warminster	1/3½	1/3½	1/3½	1/7	1/7	1/3½	1/7	11
Warrington	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Warwick	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Wells (Norfolk)	1/2½	1/2½	1/6	1/2½	1/6	1/6	1/6	1/1½
Welwyn Gar. City	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
West Bromwich	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Weston-sup-Mare	1/5	1/5	1/5	1/6	1/5	1/6	1/5	1/1½
Weymouth	1/4	1/4	1/4	1/6	1/4	1/4	1/4	1/0½
Whitby	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Wigan	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Winchester	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Windsor	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Wisbech	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Wolverhampton	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Woodbridge	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Worcester	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Worksop	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Worthing	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Wrexham	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Wycombe	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Wymondham	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11
York	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½

* The rate recognised by the National Association of Plasterers, Granolithic and Cement Workers, is 1/11½ per hour.

For Building Trade wages in Scotland, see page 8

CONTRACTS, COMPETITIONS, &c.

For some contracts still open, but not included in this List, see previous issues. Those with an asterisk are advertised in this number. Certain conditions beyond those given in the following information are imposed in some cases, such as that advertisers do not bind themselves to accept the lowest or any tender; that a fair wages clause shall be observed, that no allowance will be made for tenders and that deposits are returned on receipt of a bona-fide tender unless stated to the contrary.

The date given is the latest date when the tender, or the names of those willing to submit tenders may be sent in, the name and address at the end is the person from whom or place where quantities, forms of tender, etc may be obtained.

Following is a list of abbreviations:—Borough Surveyor, B.S.; Borough Engineer, B.E.; District Surveyor D.S., Clerk, C.; Town Clerk T.C.; County Engineer, C.E.; County Surveyor, C.S.; Surveyor, S.; Engineer E.

BUILDING, PAINTING, ELECTRIC LIGHTING, HEATING, etc

NOVEMBER 10.

Bognor Regis.—Building.—Underground sewage pumping station, for U.D.C. J. Draper, S. Dep. £5 5s.

Coventry.—Extension.—To motor-bus garage, etc., in Harnall-lane East, for Corporation. T. R. Whitehead, General Manager and Engineer, Harnall-lane East. Dep. £2 2s.

Coventry.—Installation.—Of electric light in proposed extension to motor-bus garage, etc., in Harnall-lane East, for Corporation. T. R. Whitehead, General Manager and Engineer, Harnall-lane East.

Dorking.—Sheds.—On housing estate, for U.D.C. S. S. Gettings, S.

Glamorgan.—Building.—For (1) Gowerton—new police court and alterations and additions to police station; (2) Trecynon police station—provision of two new bathrooms, and (3) Aberdare police station—installation of electric light and bells, for C.C. W. Gough Jenkins, Deputy Clerk, Glamorgan County Hall, Cardiff.

Glasgow.—Additions.—Alterations and additions at Parkhead employment exchange, for H.M.O.W. Architect, H.M. Office of Works, 122, George-st., Edinburgh. Dep. £1 1s.

Knaresborough.—Houses.—Fifteen houses, for U.D.C. S. Blenkhorn, architect, High-st. Dep. £2 2s.

Margate.—Lavatories.—Public lavatories on Rendezvous site, for T.C. B.E., 40, Grosvenor-place. Dep. £2 2s.

Newport (Mon.).—Kiosk sub-station at Glasllwch-lane, for C.B. Borough Architect. Dep. £1 1s.

Reading.—Garage.—Also a sand-blasting room at weights and measures office, Field-rd., for C.B. B.S. Dep. £2 2s.

London.—Cleaning, etc.—Of St. John's Hospital, Wandsworth, for L.C.C. Chief Engineer, Spring Gardens, S.W.1. Dep. £1.

Rochford.—Dwellings.—Twelve workmen's dwelling houses in parish of Great Wakering, for R.D.C. A. C. Madge, S. Dep. £1 1s.

Skegby.—Houses.—50 parlour and non-parlour type, and construction of roads and sewers, for R.D.C. L. Dodsley, architect, Portland-chambs., Sutton-in-Ashfield. Dep. £2 2s.

Stockport.—Depot.—Bus depot, Heaton-lane, for C.B. H. Hamer, b.S.

Sutton-in-Ashfield.—Houses.—Fifty, non-parlour type, and new roads, approaches and sewers, on Winkwbridge-lane site, for U.D.C. Warner & Dean, architects and surveyors, Mansfield-rd., Sutton-in-Ashfield. Dep. £3 3s.

Wrexham.—House.—Transformer house and shelter at Maesydre housing scheme, Holt-rd., for T.C. J. England, B.E., 1, Grosvenor-rd.

NOVEMBER 11.

Aberdare.—Installing.—Heating, hot water and steam services, etc., at Aberdare and District General Hospital, for Executive Board. Thomas Roderick & Sons, architects, Clifton-st.

Belfast.—Roof.—Roof, etc., over Street Cleansing Depot, Gardiner-st., for C.B. City Surveyor, Room 91, City Hall. Dep. £1 1s.

Chingford.—Senior Council School.—For the Essex E.C. County Architect, Springfield Old Court, Chelmsford. Dep. £2 2s. (to F. H. Owers, County Accountant, Duke-st.).

Chingford.—Foundations.—Weighbridge foundations and office at refuse disposal works, for U.D.C. S. J. Hellier, E. and S. Dep. £1 1s.

Killevny.—Building.—Dwelling-house and out-office on lands of Killevny, near Lawrencestown, Ballinasloe, Co. Galway, for Irish Land Commission. M. Deegan, Secretary, Upper Merrion-st., Dublin. Dep. £1.

Penn, Wolverhampton.—Telephone Exchange.—Erection of, for H.M.O.W. Contracts Branch, King Charles-st., London, S.W.1. Dep. £1 1s.

Sunderland.—Houses.—202 3-roomed houses and 10 4-roomed houses at Ford estate, for Corporation. B.E. Dep. £2 2s.

West Riding.—Building.—Works at Grassgills and Grafton Lodge Farms, parishes of Aldborough, Marton-cum-Grafton, and Dunsforth, for C.C. County Land Agent, County Hall, Wakefield. Dep. £1.

Widnes.—Housing.—212 dwelling-houses on Kingsway estate, for T.C. B.E. Dep. £2 2s.

Yiewsley and West Drayton.—Alterations.—Also extensions to fire station, Harmondsworth, for U.D.C. S.

NOVEMBER 12.

***Binley.**—School.—County Architect, 27, Binswood-av., Leamington Spa.

Buxton.—Painting.—Internal decoration of Fairfield endowed mixed schools, Fairfield Common, for T.C. F. Langley, B.E.

Cardiff.—Conveniences.—Public conveniences at Llandaff Fields, Roath Park Lake and depot, for T.C. G. H. Whitaker, architect, City Hall. Dep. £1 1s.

Denton.—Painting.—Also decorating about 122 houses, for U.D.C. J. B. Cooke, S.

Grimsby.—Roads, etc.—For (*a*) 1,900 super. yds. of roads and 620 super yds. of footpaths, (*b*) 133 lin. yds. of wood fencing, 6 ft. high and 320 lin. yds. of similar fencing refixed at Tuberculosis Hospital adjoining Scartho Sanatorium, for T.C. H. G. Whyatt, B.E., 170, Victoria-st. Dep. £1 1s.

King's Lynn.—School.—Junior boys' school and additions to present technical institute, London-rd., for E.C. L. F. Eagleton, architect, King-st. Dep. £3 3s.

Kingston-upon-Hull.—Heating.—Accelerated low-pressure hot water heating installation (Rayrad system), at pavilion for 36 patients, City Hospital, Cottingham, for T.C. D. Harvey, A.R.I.B.A., City Architect. Dep. £1 1s.

Kirkburton.—Cottages.—Five pairs of cottages at Storthes Hall Mental Hospital, Kirkburton, near Huddersfield, for West Riding Mental Hospitals Board. W. E. H. Burton, architect and engineer, West Riding Mental Hospitals Board Offices, Wakefield. Dep. £1.

London.—Heating.—Low-pressure hot water heating of Supplementary and Egyptian Rooms, British Museum, W.C., for H.M.O.W. Contracts Branch, H.M. Office of Works, King Charles-st., S.W.1. Dep. £1 1s.

Manchester.—Boxes.—New dressing-boxes to first-class plunge bath at Whitworth Baths, for T.C. City Architect. Dep. £1 1s.

Monmouthshire.—Building.—Gymnasium and manual instruction room at Abergavenny King Henry VIII. grammar school, for E.C. J. Bain, F.R.I.B.A., County Hall, Newport. Dep. £2 2s.

Prestwich.—Playing Field.—Draining and fencing of the Heys playing field, for U.D.C. H. T. Ainsworth, E. and S.

Thorne.—Painting.—For (*a*) internal painting, etc., (*b*) cloakroom fittings, lavatory basins, etc., at Old Grammar School, for E.C. E. L. Harrap, Education Offices, Goole.

Tullamore.—Houses.—For (1) 7 five-roomed houses and (2) 21 four-roomed houses at Tullamore Offaly, for U.D.C. T. F. McNamara & Sons, architects, 5, Dawson-st., Dublin.

Uttoxeter.—Houses.—8 at Denstone and 10 at Rocester, for R.D.C. C. E. Ingham, S.

Walsall.—Schools.—Junior mixed school for 400 children, new infants' school for 400 children, and enlargement of existing Chuckery schools to adapt same as senior boys' and girls' schools, for C.B. R. Jeffries, architect and surveyor, Kingscourt, Bridge-st. Dep. £3 3s.

Ystradgynlais.—Houses.—10 houses on Pontrhydarw, Penycae; 10 on Tanyrallt, Abercrave; 16 on Cambrian-place, Lower Cwmtrwch, 14 on Glanrhyd site, Ystradgynlais, for R.D.C. W. Edgar Evans, architects, 29, Gurnos-rd., Ystalyfera. Dep. £1 each.

NOVEMBER 13.

***Derby.**—Senior school, for the Corporation. Borough Architect, Gower-st. Dep. £1 1s.

Glasgow.—Railings.—Iron railings and gates and painter work to 114 houses at Germiston, for T.C. D. Stenhouse, T.C.

Keynsham.—Repairs.—To houses, for R.D.C. H. W. Argile, Building Surveyor, 15, High-st., Keynsham, near Bristol.

Lymm.—Conversion.—Of 142 privies into water closets, together with drainage works in connection therewith, for U.D.C. S.

Manchester.—Fencing.—Iron fencing and gates at Legh recreation ground, Dane-st., Higher Openshaw, for T.C. City E. Dep. £1 1s.

Truro.—Demolition.—Pulling down "George and Dragon" inn, 2, 3 and 4, St. Austell-st., and premises at Cragoe's-court, and erecting new premises on site, for T.C. F. A. Barnes, City S. Dep. £1.

NOVEMBER 14.

Belfast.—Windows.—New windows in All Saints' P.E. school, University-st., for C.B. Education Architect. Dep. £1 1s.

Bognor Regis.—Cottages.—Four cottages and set of farm buildings on Middleton estate, near Bognor Regis, for West Sussex C.C. Haydn P. Roberts, F.R.I.B.A., County Architect, North-st., Chichester.

Bristol.—Houses.—Twenty, Hillside-rd. housing site, St. George, and 108, St. Anne's housing site, for T.C. Lessel S. McKenzie, City E. and S., Housing Department, 51, Prince-st.

***Salisbury.**—Repairs and Material, etc.—For Salisbury Plain, West District, Larkhill, Commander, R.E.s, 2nd Camp, Larkhill, Wilts.

Skibbereen.—School.—National school at Skibbereen, Co. Cork, for Commissioners of Public Works. T. Cassedy, secretary, Office of Public Works, Dublin. Dep. £1.

Worthing.—Shelter.—At East Worthing, for T.C. B.S.

NOVEMBER 15.

Cheshire.—Extensions.—To Winsford County secondary school. County Architect, Newgate-st., Chester. Dep. £2 2s.

Kingston-upon-Hull.—Houses.—102 tenement dwellings, Southcoates-lane, for T.C. D. Harvey, A.R.I.B.A., City Architect. Dep. £2 2s.

Near Ilkley.—Painting.—Internal painting and decorating at Middleton-in-Wharfedale sanatorium, near Ilkley, for West Riding C.C. West Riding Architect, County Hall, Wakefield.

***Woodbridge.**—Police station.—For East Suffolk C.C. County Architect, County Hall, Ipswich. Dep. £2 2s., payable to "The Treasurer."

NOVEMBER 17.

Birmingham.—Extensions.—For "new single rooms extensions" to female 8 reception ward, at Winson Green Mental Hospital, Lodge-rd., for T.C. F. H. C. Willshire, Clerk to Committee of Visitors. Dep. £3 3s.

***Cliftonville.**—Painting and Repairs.—At Princess Mary's Hospital, for the L.C.C. Clerk, County Hall, Westminster Bridge, S.E.1. Dep. £1 1s.

Edinburgh.—Lighting.—Electric lighting installation at Prestonfield School, for T.C. W. F. Mitchell, consulting electrical engineer, 34, St. Andrew-sq.

***Forest Gate, E.**—Central School.—For the West Ham Education Committee. J. H. Jacques, F.R.I.B.A., 61, West Ham-lane, Stratford, E.15. Dep. £2.

Hendon, N.W.4.—Town Hall Extensions.—For the U.D.C. Chairman of the Council, Town Hall. Dep. £6 6s.

Henfield.—Station.—Pumping station at outfall of Silk Valley low level sewer, including cast-iron rising mains, concrete roads, surface water drainage and other works, for U.D.C. A. O. Knight, E. and S. Dep. £5 5s.

London.—Additions.—Additional w.c.s and attendants' boxes at two of the refreshments chalets in Bishop's Park, for Fulham B.C. B.E. and S.

London.—Chapel.—Chapel and shelter at North Sheen Cemetery, Lower Richmond-rd., Richmond, for Fulham B.C. B.E. and S. Dep. £2.

London.—Cleaning, etc.—Of Casual wards, for L.C.C. Chief Engineer, Spring Gardens, S.W.1. Dep. £1.

Northampton.—New Technical College.—Erection of the first portion, for the E.C. Secretary of Education, 4, St. Giles' St. Dep. £5 5s. (payable to the Corporation).

***Notting Hill.**—Flats.—For the Kensington Borough Council. Town Clerk, Town Hall, W.8. Dep. £2 2s.

Stanley.—Painting.—In connection with their various housing schemes, for U.D.C. A. W. Quibell, S.

Tynemouth.—Wall.—Construction of a mass concrete retaining wall at Cullercoats, for C.B. J. L. Beckett, B.S. Dep. £2 2s.

NOVEMBER 18.

Liverpool.—Railings.—850 lin. yds. wrought-iron railings, 5 ft. 6 in. high, for T.C. City E.

Shrewsbury.—Alterations and additions.—To station sorting office, for H.M.O.W. Contracts Branch, King Charles-st., London, S.W.1. Dep. £1 1s.

NOVEMBER 19.

Liverpool.—Alterations.—Also extensions, Walker Art Gallery, for T.C. Briggs & Thornley, architects, Royal Liver-building, Liverpool. Dep. £5 5s.

Prestwich.—Convenience.—In Bury Old-rd., at rear of transformer sub-station opposite Heaton Park station, for U.D.C. S. Dep. £1 1s.

Selly Oak.—Telephone exchange—Erection of, for H.M.O.W. Contracts Branch, King Charles-st., London, S.W.1. Dep. £1 1s.

NOVEMBER 20.

Lochinver.—Houses.—3 blocks of semi-detached houses, for Sunderland C.C. Horne & Murray, architects, Golspie.

NOVEMBER 21.

Church.—Library.—County branch library, for Lancashire E.C. Stephen Wilkinson, F.R.I.B.A., 16, Ribblesdale-place, Preston. Dep. £2.

Dundee.—Hostel.—New hostel and alterations on existing hostel at Mayfield, for the National Committee for the Training of Teachers, St. Andrew's Provincial Committee. Gauldie Hardie & Sharpe, architects, 26, Commercial-st., Dundee. Dep. £1 1s.

Grimsby.—Extensions.—Of maternity home at Nunsthorpe, for C.B. H. Gilbert Whyatt, B.E. and S. Dep. £3 3s.

NOVEMBER 22.

Rothwell.—House.—Grammar school, gymnasium and caretaker's house, for West Riding E.C. Education Officer, County Hall, Wakefield.

Skipton.—Extensions.—At Skipton boys' grammar school, for West Riding E.C. Education Officer, County Hall, Wakefield.

NOVEMBER 24.

Arklow.—Repairs.—To 112 artisans' dwellings, situate in 7 terraces, for U.D.C. Town S.

Benfleet.—Fire Station.—At Hadleigh, for U.D.C. S. Dep. £2 2s.

***Carlisle.**—Alterations and additions.—To the Castle, for H.M.O.W. The Secretary, Storey's-gate, Westminster, London, S.W.1. Dep. £1 1s.

Eccles.—Installation.—Of electric light and power wiring, fittings, etc., in new showroom and offices in Church-st., for T.C. Borough Electrical Engineer, Electricity Works, Cawdor-st. Dep. £1 1s.

London.—Cottage.—Foreman's cottage on site in Putney Vale Cemetery, Putney-vale, S.W.15, for Wandsworth B.C. G. L. Elkington, A.R.I.B.A., Norfolk House, 7, Laurence Pountney-hill, E.C.4.

***London, N.W.**—Houses and Flats.—For the Willesden U.D.C. Clerk, Town Hall, Dyne-rd., Kilburn, N.W.6.

NOVEMBER 25.

***Northwood.** — Telephone Exchange. — For H.M.O.W., Contracts Branch, King Charles-st., London, S.W.1. Dep. £1 1s.

NOVEMBER 27.

***Sparsholt, nr. Winchester.**—Extension and Alterations.—To hostels. Clerk, The Castle, Winchester. Dep. £1 1s. payable to the Hampshire C.C.

DECEMBER 1.

Inchicore.—Shops.—For Directors of Great Southern Railways. Chief Engineer, Westland-row Station, Dublin, C.S. Dep. £5.

***Pembury.**—Additions and Alterations.—For the Kent C.C. Clerk, Sessions House, Maidstone. Dep. £5 5s.

Waterford.—Repairs.—To tower and other works to St. John's Church. R. A. Cutlar, architect, 57, St. Declan's-place. Dep. £2 2s.

DECEMBER 8.

***Lincoln.**—Additions and alterations.—To County Offices. H. G. Gamble, County Architect, Bank-st. Chambers. Dep. £5 5s.

NO DATE.

***Chorley.**—Employment Exchange.—For H.M.O.W. Contracts Branch, King Charles-st., London, S.W.1. Dep. £1 1s.

***Doncaster.**—Extensions.—To Hyde Park Council school. J. Blythe Richardson, 26, Printing Office-st. Dep. £2 2s.

***London, N.W.10.**—Alterations and Additions.—To shop premises. Timothy Whites (1928), Ltd. (Construction Dept.), 30, Chandos-st., Portsmouth.

Romsey.—Alterations.—Also additions to shop premises, 3, The Hundred, Romsey, for Timothy Whites (1928), Ltd. Timothy Whites (1928), Ltd. (Construction Dept.), 30, Chandos-st., Portsmouth.

Sprotborough.—Installation.—Of electric light at Council school, for West Riding E.C. A. J. Dempster, Divisional Clerk, Winchester House, Scot-lane, Doncaster.

***Weston-super-Mare.**—Alterations and Additions. —To shop premises. Timothy Whites (1928), Ltd. (Construction Dept.), 30, Chandos-st., Portsmouth.

MATERIALS, etc.

NOVEMBER 10.

Pudsey.—Pipes.—4,569 yds. of cast-iron 3 in. S. and S. water pipes, tested to 600 ft. head, together with valves and fire hydrants, etc., for T.C. Hanson A. Demaine, T.C.

NOVEMBER 12.

Cambridge.—Road Materials.—For C.C. A. E. Peake, C.S.

Northamptonshire.—Granite Chippings, etc. For C.C. E. A. Black, C.S.

NOVEMBER 13.

Newcastle-upon-Tyne.—Builders' Materials, etc.—For Tyne Improvement Commission. A. Blacklock, secretary, Bewick-st.

NOVEMBER 14.

London.—Building Materials.—For Wandsworth B.C. D. A. Nicholl, T.C.

NOVEMBER 15.

West Riding.—Road Materials.—For C.C. West Riding Surveyor, County Hall, Wakefield.

NOVEMBER 17.

Plymouth.—Tubes.—1,200 lin. yds. reinforced concrete tubes, for C.B. J. Wibberley, City E.

West Hartlepool.—Highway Materials.—For C.B. F. Durkin, B.E.

NOVEMBER 18.

Totnes.—Highway Materials.—For R.D.C. C. H. Heal, S., 103, High-st.

NOVEMBER 19.

Dublin.—Building Materials.—For Port and Docks Board. E. H. Bailey, secretary, Westmoreland-st.

NOVEMBER 21.

Carlisle.—Pipe.—1,650 lin. yds. of unreinforced concrete egg-shaped pipes, for T.C. P. Dalton, City E. and S.

NOVEMBER 22.

Gloucestershire.—Road Materials.—For C.C. C.S.

NOVEMBER 25.

Dublin.—Builders' Materials.—For Gt. Southern Rly. Co. H. S. Coe, secretary, Kingsbridge Station.

NOVEMBER 29.

Buxton.—Road Materials.—For T.C. F. Langley, B.E.

DECEMBER 1.

St. Thomas.—Road Materials.—For R.D.C. J. S. Madge, S., Brooklands, Heavitree, Exeter.

ENGINEERING, IRON AND STEEL

NOVEMBER 10.

Wigton.—Extensions.—Six miles of vertically cast-iron pipes of 3 in. and 2 in. diameters, together with excavation of trenches, hauling, laying, jointing, and hydraulically testing of pipes, together with provision of necessary valves, fire hydrants, etc., and other works incidental thereto, at Bowness, for R.D.C. Taylor & Wallin, engineers, 1, Saville-place, Newcastle-on-Tyne. Dep. £3 3s.

NOVEMBER 11.

Ayr.—Bridge.—Deviation of Nethermains-rd. and construction of new highway bridge over River Garnock, at Nethermains, Kilwinning, for C.C. Road S. Dep. £2 2s.

Horsforth.—Extensions.—Sewage ironwork, comprising channel penstocks, sluice doors, sludge valves and manhole covers, for U.D.C. Jas. E. Aldersley, E. Dep. £2.

Horsforth.—Extensions.—Of sewage disposal works and surface water sewering, for U.D.C. Jas. E. Aldersley, E. Dep. £5.

Isle of Wight.—Sewerage.—Five miles of stoneware and cast-iron pipe sewers, with manholes and incidental works in parish of Northwood, for R.D.C. W. E. Blizard, engineer, Lansdowne House, Castle-lane, Southampton. Dep. £3 3s.

NOVEMBER 12.

Tullamore.—Water Supply.—Ferro-concrete water tower of 100,000 gallons capacity at Clonminch, near Tullamore, for U.D.C. P. H. McCarthy, consulting engineer, 26, Lower Leeson-st., Dublin. Dep. £10.

NOVEMBER 13.

Flamborough.—Tanks.—Circulating water tanks at Light House, for Trinity House. Secretary, Trinity House, Tower Hill, London, E.C.3.

Nantwich.—Sewerage.—At Shavington, for R.D.C. H. Crabtree, E., 21, Pillory-st. Dep. £5 5s.

NOVEMBER 14.

Inverness.—Bridges.—Construction of Kinchnish and Nevis bridges, near Fort William, on Glasgow-Inverness-rd., for C.C. J. W. McKillop, County Clerk, The Castle, Inverness. Dep. £3 3s.

Lexden and Winstree.—Water Supply.—In parishes of Abberton, Langenhoe, Peldon, Great and Little Wigborough, Salcot and Virley, for R.D.C. Sands & Walker, consulting engineers, Milton-chams., Nottingham. Dep. £3 3s.

New Mill.—Mains.—4,000 lin. yds. of 6-in., 4-in. and 3-in. cast-iron pipes and specials, sluice and air valves, hydrants, including brick casings, fixing of surface boxes, connections to existing mains, etc., complete, for U.D.C. C. H. Marriott, Son, & Shaw, civil engineers, Church-st.-chambers, Dewsbury. Dep. £1 1s.

NOVEMBER 15.

Penrith.—Water Supply.—Mass concrete reservoir, at Maiden-hill, for U.D.C. G. A. J. Edmundson, E. and S. Dep. £2 2s.

NOVEMBER 17.

Loughborough.—Station.—Pump basement and superstructure, together with electrical substation adjoining; length of about 130 yds. of 30-in. cast-iron sewer; and construction of storm water overflow, etc., for T.C. W. Granger, B.S. Dep. £2 2s.

Markinch.—Sewage.—For T.C. Bruce & Proudfoot, civil engineers, 63, Nicol-st., Kirkcaldy. Dep. £1 1s.

NOVEMBER 18.

Bedworth.—Water Supply.—Reinforced concrete receiving tank and 750,000 gallons reservoir in connection with new water supply scheme, for U.D.C. H. W. Crowther-Green, E. Dep. £2 2s.

Northfleet.—Sewage.—Sewage disposal works at Brookvale-farm, for U.D.C. J. A. Mitchell, S. Dep. £5.

Wallasey.—Extension.—1,550 lin. yds. of sea wall, a marine lake, excavation and filling at rear of sea wall to promenade formation level, and laying of about 760 lin. yds. of 21-in. diameter cast-iron pipe outfall sewer, together with all other works incidental thereto, such as slipways, steps, drainage, valves, manholes, etc., at New Brighton, for C.B. L. St. G. Wilkinson, B.E. Dep. £21.

NOVEMBER 19.

Heanor.—Sewerage.—Sewerage and sewage disposal works, for U.D.C. Elliott & Brown, chartered civil engineers, Burton-bldgs., Parliament-st., Nottingham. Dep. £5 5s.

Pevensey.—Road.—Improvement of part of Bexhill coastal road and construction of new road beside existing one between Pevensey and Constable Farm, Bexhill, for total length of 3¾ miles, together with construction of three reinforced concrete bridges and contingent works, for East Sussex C.C. C.S. Dep. £100.

NOVEMBER 20.

Poole.—Wall.—Coast protection at Canford Cliffs, including construction of sea wall in reinforced concrete, approximately 500 yds. in length, together with groynes, promenade, subsoil drains, rubble walls and other works incidental thereto, for T.C. E. J. Coodacre, B.E. Dep. £3 3s.

Reading.—Reservoir.—Also water tower and ancillary to existing high service reservoir at Prospect-lane, for Corporation. John Taylor & Sons, engineers, Caxton House, Westminster, S.W.1. Dep. £5.

NOVEMBER 21.

Grantham.—Sewerage.—Main outfall and storm water sewers, together with manholes, overflow chambers, detritus tank, storm water tanks, sludge drying beds, sewage distributing carriers and other incidental works, for T.C. Percy A. Benn, B.E. Dep. £2 2s.

NOVEMBER 22.

Nottinghamshire. — Bridges. — For (a) Trowell Canal bridge, and (b) Brinsley bridge, for C.C. J. Cracroft Haller, C.S., Shire Hall, Nottingham.

DECEMBER 8.

Chester.—Extension.—To sewage disposal works, for T.C. C. Greenwood, City E. and S. Dep. £2 2s.

ROAD, SEWERAGE, AND WATER WORKS

NOVEMBER 10.

Bognor Regis.—Reconstruction.—Of Longford-rd., Canada-grove, Argyle-rd., Esplanade (part), for U.D.C. J. Draper, S.

Cheltenham.—Street.—30 ft. wide and 170 yds. in length, with necessary sewers and drains off Folly-lane, and for completion of Folly-lane, for T.C. B.E.

Dun Laoghaire.—Road.—Laying down of about 600 sq. yds. concrete path at Temple-rd., Blackrock, for T.C. Henry E. Powell, Blackrock. Dep. 10s.

Hornchurch. — Making-up. — Of Cranham-rd., approximately 1,120 ft. in length, for U.D.C. F. Anderson, S.

Loanhead.—Mains.—New water mains consisting of 9-in., 7-in., 5-in. and 4-in. cast-iron pipes (about 5,000 lin. yds.), from storage tank at Hillend to and through Loanhead, for T.C. Carfrae & Morrison, C.E., 4, Hill-st., Edinburgh. Dep. £1.

Middleton Cheney.—Sewers.—Sewers and sewage purification works for village of Middleton Cheney, for R.D.C. C. E. Barnes, clerk. Dep. 6s.

NOVEMBER 11.

Barnes.—Making-up.—Of York-av. (part 1), Mortlake, for U.D.C. F. P. Kindell, E. and S. Dep. £2 2s.

Birmingham.—Paving.—Supplying, laying and maintaining 2-in. hand-laid asphalt paving in Fox Hollies-rd., Hall Green, for T.C. H. H. Humphries, City E. and S. Dep. £1.

Carlisle.—Road.—196 lin. yds. of new roadway, consisting of tarmacadam footways and carriageway, and also approximately 315 lin. yds. of sewers on Raffles housing estate, for T.C. P. Dalton, A.M.Inst.C.E., A.R.I.B.A., City E. and S. Dep. £1 1s.

Gosforth.—Roads.—Laying flagged footways in John-st. and back street on west side of Coxlodge-st., for U.D.C. G. Nelson, E. and S.

Herne Bay.—Improvements.—To Lane-end, for U.D.C. E. and S.

Margate.—Sewering.—60 in. by 40 in. egg-shaped concrete sewer in Park-lane and Thanet-rd., for T.C. B.S.

Reading.—Sewers.—1,900 yds. of concrete tube sewers, diameter 15 in. to 24 in., and about 1,500 yds. of 9-in. stoneware pipe sewers, on concrete foundations, at depths varying from 3 ft. to 19 ft. 6 in., together with manholes, galleys, branch drains, outfall to River Thames, etc., at Caversham Heights, for C.B. B.S. Dep. £2 2s.

Southgate. — Making-up. — Branscombe-gardens, Seaforth-gardens, Denleigh-gardens (section No. 2), Pevensey-av., Bexhill-rd., and Hastings-rd., for U.D.C. R. Phillips, S. Dep. £2.

NOVEMBER 12.

Prestwich.—Making-up.—Also draining of Park-rd., Brooklands-rd. to Manchester boundary, for U.D.C. H. T. Ainsworth, E. and S. Dep. £1 1s.

Rowley Regis.—Sewers.—Construction at Gipsy-lane and Portway, about 4,300 yds. of 9-in. and about 125 yds. of 6-in. cast-iron and stoneware pipe sewers, together with manholes and other incidental works, for U.D.C. Willcox & Raikes, engineers, 33, Great Charles-st., Birmingham.

Tendring.—Mains.—10,500 yds. of 6 in., 4 in. and 3 in. diameter cast-iron water distributing mains, complete with valves, hydrants, etc., in parish of Little Holland, for R.D.C. S. Francis, Water Engineer, Station-rd., Clacton-on-Sea.

Twickenham.—Street Works.—Roads on Leeson housing estate, between Fifth Cross-rd. and Sixth Cross-rd., for T.C. Gilbert R. King, B.E. and S. Dep. £2 2s.

NOVEMBER 13.

Erith.—Sewers.—Surface-water sewer in New-rd., Abbey Wood; foul sewer in New-rd., Abbey Wood; surface-water sewer in Park-crescent, Erith; surface-water sewers at Lower Belvedere, and surface-water sewers at Upper Belvdere, for U.D.C. Harold Hind, E. and S. Dep. £1 1s.

Middleton.—Making-up.—Also sewering, etc., of four new streets in connection with Rearshaw South (Green-lane site) housing scheme, for T.C.

NOVEMBER 14.

London.—Paving.—Laying creosoted deal blocks on new concrete foundation, footway paving, construction of new retaining walls and other appurtenant works in Thurloe-place, between Exhibition-rd. and Cromwell-place, for Kensington B.C. B.E.

NOVEMBER 15.

Stoke-on-Trent.—Sewage.—2,200 lin. yds. of 15-in. cast-iron spigot and socket pipes, providing and laying 9-in. and 6-in. cast-iron sewers, manholes, and other incidental works, including small iron bridge across River Trent at Trentham, and 10 cast-iron sludge presses, for T.C. City Sewage Engineer, Leek-rd.

West Riding.—Surfacing.—With 2-coat asphalt 3 in. in thickness on provided concrete foundation of area of approximately 14,100 sq. yds. on Doncaster and Tinsley (Swinton branch) and Warren Vale County roads, within urban districts of Mexborough and Swinton, for C.C. West Riding Surveyor, County Hall, Wakefield. Dep. £1.

NOVEMBER 17.

Dunstable.—Making-up.—Of Capron-rd., Clifton-rd., Stuart-st., for T.C. Wm. F. Wilkins, B.S. Dep. £3 3s.

Edmonton.—Making-up.—Of Lennard-rd. and Cambridge-gardens, for U.D.C. E. J. Willis, E. and S. Dep. £2 2s.

Mitcham. — Making-up. — Lavender-grove and widening and improvement of Lewis-rd., for U.D.C. S.

Quarry Bank.—Roads.—On Saltwells Wood housing site, off Coppice-lane, for U.D.C. A. Homfray, clerk. Dep. £2 2s.

Ruislip-Northwood. — Making-up. — Green-walk, Ruislip; cul-de-sac off Green-walk, Ruislip; Hawthorn-av., Eastcote; Linkaway, Northwood (portion only), for U.D.C. E. and S. Dep. £2.

St. Helens.—Making-up.—Atlas-st., from Higher Parr-st. to Earl-st., for Corporation. A. P. Statham, Borough and Water Engineer. Dep. £1 1s.

Skegness.—Sewers.—Surface water sewers and road works in Grosvenor-rd. between Winthorpe Drain and Church-rd., for U.D.C. S.

NOVEMBER 22.

Gloucestershire.—Materials for Road Repairs.—For C.C. C.S.

NOVEMBER 24.

Beckenham.—Making-up.—Oakwood-av., Witham-rd. and Kelsey Park-rd., for U.D.C. H. Storr Best, S., 36, High-st. Dep. £2.

NOVEMBER 26.

Gosport.—Sewer.—Laying of approximately 7,250 yds. of main sewer in Gomer-lane, Military-rd., Fareham-rd., Wych-lane, etc., together with various house connections thereto and new ejector station, for T.C. A. Barlow, B.E. Dep. £2 2s.

Gosport.—Making-up.—Of Woodley-rd., Woodstock-rd. and Cranbourne-rd., for T.C. H. R. Mangnall, T.C. Dep. £2 2s.

Public Appointments

NOVEMBER 15.

Chelmsford.—(*a*) Assistant Architect. (*b*) Junior Assistant Quantity Surveyor. (*c*) Two Senior Assistant Architects, (*d*) Senior Assistant Quantity Surveyor, required by the Essex C.C. Jno. Stuart, F.R.I.B.A., Old Court, Springfield, Chelmsford.

London.—Assistant Clerk (male) required in Borough Engineer's Department. Town Clerk, Lambeth Town Hall, Brixton Hill, S.W.2.

London, W.C.—(*a*) Storekeeper, (*b*) Depôt Clerk, required by the Holborn B.C. Borough Engineer, Town Hall, High Holborn, W.C.1.

South Shields.—Architectural and Housing Assistant. Town Clerk.

NOVEMBER 17.

Bootle.—Architectural Assistant (temporary). Town Clerk, Town Hall.

***Northampton.** — Architectural Assistant. — Borough Engineer, Guildhall.

***Northampton.** — Clerk of Works. — Borough Engineer, Guildhall.

NOVEMBER 19.

***Burnley.**—Architectural Assistant (Temporary) Borough Engineer, Town Hall.

NOVEMBER 29.

***Wakefield.**—Architectural Assistants and Building Inspector required by the West Riding C.C. Clerk, County Hall.

DECEMBER 1.

***Durham.**—Architectural Assistant required by C.C. F. Willey, 34, Old Elvet.

Nettleson Players.

The Nettleson Players, of Messrs. Nettlefold and Sons, Ltd., presented on Friday, October 31, at King George's Hall, W.C.1, the well-known farce "It Pays to Advertise." This piece was acted in the most competent manner, and is indicative of much hard work by the producer, Captain R. D. W. Thompson, and all the members of the cast, more especially "Mary Grayson," Miss Marjorie Rippon; "Comtesse de Beaurien," Miss Constance Rietaker; "Rodney Martin," Mr. Hugh Nettlefold; "Sir Henry Martin," Mr. R. D. W. Thompson; and "Ambrose Peale," Mr. Harry Lewis. The scenery, which was of a high standard, was carried out by the Chiswick Studios, Tramway Depot, W.4. The play, which was received with great applause, is to be produced again on January 5 and 6, 1931, at the New Scala Theatre, Charlotte-street, W.C.1, in aid of the Royal Metal Trades Pension and Benevolent Society.

The Application of British Steelwork.

A number of pamphlets of a more than usually interesting nature have been issued by the British Steelwork Association with a view to drawing further attention to the pre-eminent merits of British steelwork for buildings, bridges and general engineering work. As architects already are aware, the steel-framed building permits fluidity in planning, gives economy in making alterations and additions, so that a building, in the changing conditions of the present day, remains a modern up-to-date structure. Strength and reliability, rapidity of construction, and economy—through saving space and reducing foundation costs and by speedy erection—are features of steelwork which are becoming more fully realised. The steelwork produced by firms comprising the British Steelwork Association is manufactured to British Standard Specifications—in itself a recommendation of no light order. Architects—for their clients' sake and their own convenience—should include the following clause in their specifications:—"The steel supplied to be the British Standard Specification No. 15 (1930), manufactured and rolled in Great Britain."

PROPOSED NEW BUILDINGS & OTHER WORKS*

In these lists care is taken to ensure the accuracy of the information given, but it may occasionally happen that, owing to building owners taking the responsibility of commencing work before plans are finally approved by the local authorities, "proposed" works at the time of publication have been actually commenced. Abbreviations: T.C. for Town Council; U.D.C. for Urban District Council; R.D.C. for Rural District Council; E.C. for Education Committee; B.C. for Borough Council; P.C. for Parish Council; M.H. for Ministry of Health; M.T. for Ministry of Transport; C.B. for County Borough; B. of E. for Board of Education; M.W.B. for Metropolitan Water Board; Borough Surveyor, B.S.; Borough Engineer, B.E.; District Surveyor, D.S.; Clerk, C.; Town Clerk, T.C.; County Engineer, C.E.; County Surveyor, C.S.; Surveyor, S.; Engineer, E.

Acton.—T.C. approved: A. Davies & Co., Horn-lane, Acton, W.3, transformer chamber, Park-rd. East; E. C. P. & H. Monson, Finsbury-pavement House, E.C.2, architect, alterations and additions, Dr. Gibson, 22, Rosemont-rd.; Met. Electric Supply Co., 16, Stratford-place, W.1, transformer chamber, rear of 352, Princes-gardens; F. W. Ferris, Cecil-rd., Acton, W.3, builder, 11 houses, Cecil-rd.; Petch & Fermaud, 12, Buckingham Palace-rd., S.W.1, architects, lavatory addition, "The Railway Hotel," High-st.; G. Thraie Jell, 20, Hanover-sq., W.1, architect, alterations and additions, Weimers, Vale-grove; North Acton Conveyor and Elevator Co., Ltd., Wales Farm-rd., W.3, retaining wall and foundation for future extension, Wales Farm-rd.; Douglas Smith & Barley, 50, Queen Anne's-gate, S.W.1, architects, 6 houses, 308-310, Princes-gardens; John Quality, Ltd., Mitre-sq., E.C.3, addition to shop, Old Oak Common-lane; W. W. Hanshaw, 6, Bollo Bridge-rd., Acton, W.3, builder, houses and garage, Baldwyn-gardens; Eburite Paper Co., Ltd., Park Royal-rd., N.W.10, loading shelter, G.W.R. estate, Park Royal-rd.; F. R. Taylor, 12, Pleydell-av., W.6, architect, petrol stores, Motor Services (London), Ltd., Southfield-rd.; Hodsons Concrete Units, Ltd., Willifield House, Willifield-way, N.W.11, works, Coronation-rd.; G. P. Pratt, 174, High-st., Acton, W.3, architect, shops, flats and garages, W. Burrows, East Acton-lane; J. Atherton & Co., 134, East Acton-lane, Acton, W.3, builders, 20 houses, Friary-rd., 14 houses, Western-av.; Wesley Estates, Ltd., Wesley-av., N.W.10, builders, details and lay-out, 66 houses, Newark-crescent, 1 house, Harold-rd.; G. Bollom & Sons, Ltd., Horn-lane, Acton, W.3, builders, addition, "Duke of York" p.h., Horn-lane; J. A. Perriss, 26, Willcott-rd., Acton, W.3, builder, 6 garages, Lexden-rd.; Metropolitan Electric Supply Co., 16, Stratford-place, W.1, storage buildings, at power station, Acton-lane; H. Butcher & Co., 63-64, Chancery-lane, W.C.2, architects, pump house, British Can Co., Westfields-rd.; F. W. Woolworth & Co., 311, Oxford-st., W.1, additions, 110, High-st.; F. E. Simpkins, Estate Office, Chase Estate, Park Royal-rd., N.W.10, architect, factory, Tokalon, Chase-rd.; Hearn & Chuter, 13, Town Hall-bigs., Chiswick, W.4, architects, alterations and additions, Empire Motors, 506, High-rd., Chiswick; F. D. Rice, 52, Julian-av., Acton, W.3, architect, workshop and garages, T. Pocklington, King Edwards-Gardens; S. Warwick, 3, Cockspur-st., S.W.1, architect, bank, Westminster Bank, Ltd., corner of Western-av. and Park Royal-rd.; F. E. Simpkins, Estate Office, Chase estate, Park Royal-rd., architect, timber store, Cunard Motor Co., Chase-rd.; J. Atherton & Co., East Acton-lane, W.3, builders, 4 houses, adjacent Foster-rd. and Western-av.

Ashton-under-Lyne.—Percy Howard, A.R.I.B.A., 88, Mosley-st., Manchester, architect for senior boys' school at Ashton-under-Lyne, submitted revised plans to B. of E. Cost £22,896.

Askern.—West Riding E.C. acquired site in Moss-rd. for public elementary school to accommodate 250 children, at £3,215.

Bath.—E.C. decided that sketch plans of W. A. Williams for improvement of offices at East Twerton Council school be submitted to B.E. and tenders be obtained.—City E. submitted sketch plans for provision of underground conveniences in Orange-grove.

Berwick.—T.C. approved: alterations, 12, Castlegate, Berwick, by Gray & Paterson, for Urban Electric Supply Co., Ltd.

Billericay.—S. been instructed by R.D.C. to prepare plans for houses at Great Bursted.

Birmingham.—E.C. approved plans by Harvey & Wicks, F. and A.R.I.B.A., 5, Bennett's-hill, Birmingham, for Council school at Warstock-lane, Billesley, to cost £18,000. Plans also approved for alterations and additions to Burlington-st. and Gem.-st. special schools, to cost £2,700 and £480 respectively; and for converting Congregational church buildings at Stratford-rd., Sparkhill, into a school clinic.

Bishops Stortford. — Slater & Mobberley, F.F.R.I.B.A., 46, Berners-st., London, W.1, preparing plans for Hockrill College, which will be utilised for Church of England Training College.

Blackpool.—C.B. approved: 12 houses, Antrim-rd., C. & C. Hilton; 4 houses, Westmorland-av., F. Francis; 2 houses and 2 bungalows, Sandhurst-av., J. Ridyard; 8 houses, Orkney-rd., J. & W. Ormerod; 4 houses, Sandhills-av., G. Woodhead; 4 houses, Sunnybank-av., R. Brown & Sons; 7 houses, Appleby-rd., J. Fielding & Son; alterations, Edward-st. and Wood-st., Liverpool, London and Globe Insurance Co., Ltd.; 8 washhouses, Sawley-av., B. Smith; additions, 127, Lytham-rd., Martins Bank, Ltd.; garage and flats, Springfield-rd., F. Lee; garage, Charnley-rd., Blackpool Co-operative Society, Ltd.; alterations and additions, Bank Hey-st., R. H. O. Hill, Ltd.

Blackpool.—J. C. Derham, architect, Church-st., preparing plans for alterations to premises in Edward-st. and Wood-st., for directors of Liverpool and London and Globe Insurance Co., Ltd., 1, Dale-st., Liverpool.—Corporation propose technical school. Borough Architect, J. S. Robinson, A.R.I.B.A.

Boscombe.—Rev. Ralph Baines proposing extension of Corpus Christi Church, at £15,000. Plans by W. C. Mangan, 18, Guildhall-st., Preston.

Bournemouth.—T.C. approved: alterations, bank (corner), Wimborne and Talbot-rds., Provincial Bank, Ltd.; alterations and additions, premises (corner), Withermoor and Wimborne-rds., Butler & Sons; alterations, King's Hall, Bath-rd., "Royal Bath Hotel" (Bournemouth), Ltd.; 4 houses (corner), Ashton & Carey-rds., A. Pope; alterations and additions (corner), Old Christchurch-rd. and Richmond-hill, National Provincial Bank, Ltd.; store, rear 443, Wimborne-rd., P. and B. Co-op. Society, Ltd.; Wesleyan Church (corner), Portman-rd. and Haviland-rd., the Trustees.

Bridlington.—T.C. approved: C. L. Waite, 4 bungalows, St. Oswald-rd.; F. Vaux, 4 houses, St. Andrew-rd.; F. Vaux, 8 houses, St. Andrew-rd.; J. R. Earnshaw, 4 houses, Kingsgate, E. Gray.

Burnley.—E.C. has under consideration scheme for extension of Municipal College, at £18,000. A. Race, B.E.

Bury.—Funds being raised for Church of Guardian Angels, Elton. Rev. T. Farrell.

Calder Valley.—West Riding Education Department propose middle school, at £33,000. Tenders to be invited.

Chelmsford.—A. Wiseman, A.R.I.B.A., architect, 67, Duke-st., prepared plans for offices and garage, for the National Omnibus and Transport Co., Ltd., of 206, Brompton-rd., London, S.W.3.

Chesterfield.—Montague Burton, Ltd., tailors, Hunslet-rd. Mills, Leeds, to erect branch premises in Burlington-st. Plans by H. Wilson, architect, 81, North-lane, Roundhay, Leeds.

Dewsbury.—Borough Architect, T. Blakeley, to prepare plans for alterations to infants' department of Eastborough Council school.

Dublin.—Plans approved by City Architect: Cabra-rd., 4 houses, Fennell & Madden; 39 and 40, Henry-st., shop front and alterations, Montague Burton, Ltd.; 57 and 59, Vernon-av., rebuilding back wall, etc., Mr. Wachmann; Emmet-rd., extensions to St. Michael's Church; 166, Pearse-st., rebuilding. J. Murphy; 16, Westmoreland-st., alterations. B. & I. Steam Packet Co.; Shelbourne Park, South Lotts-rd., stand, National Greyhound Racing Association.

Dudley.—Mitchells & Butlers, Ltd., brewers, Birmingham, acquired site for licensed premises on Priory estate, subject M.H.

Dukinfield.—Housing Committee recommending T.C. to make start on first 100 houses on land off Higher King-st. by direct labour. E. N. Stanion, B.S.

Ealing.—T.C. approved: St. Mary's-rd., 7 shops, Shops and Houses, Ltd., 3, George-court, W.C.2; Kent-gardens, 2 houses and 2 garages, G. Green & Sons, Fowley-rd., Hillingdon; Birkbeck-av., 8 houses and 4 garages; Long-drive, 4 houses, C. & T. Ware, 40, Claygate-rd., West Ealing; Horsenden-lane, revised drainage, A. Sanderson & Sons (architect, O. P. Milne, 64, Wigmore-st., W.1); Valhs-way, 6 houses, G. Wimpey & Co., Ltd., The Grove, Hammersmith, W.6; Eastcote-av., 4 houses and such parts of Nos. 74 and 76, Eastcote-av. and garage, Rhys J. Rees & Co. (architects, P. H. Edwards, Ltd., 237, Golders Green-rd., N.W.11); Oldfield-lane, 2 shops, F. W. Showers, G.W.R. Surveyor's and Estate Office, 153, Westbourne-ter., W.2; The Homeway, 14 houses, Great Western Land Co., Ltd., Greenford-av., Hanwell, W.7; Greenford-rd., 12 houses, S. Smith, "Dilston," Edgware-rd., Cricklewood, N.W.4; Beechmount-av., 4 houses, Great Western Land Co., Ltd., Greenford-av., Hanwell, W.7; Northfield-av., 10 shops with living accommodation over, A. Cowen (architect, G. Whittaker, 13, Queen Anne's-gate, S.W.1); Ruislip-rd., house, H. D. Tigwell (architect, R. A. C. Churchward, 12, Victoria-st., S.W.1); Greenford-rd., shop, Marrable Bros., 60, Pretoria-rd., Leytonstone, E.11; Windmill-lane, bungalow, J. W. J. White (architect, J. H. Sagar, Railway Bridge (Met. and District Station), Ruislip); Ealing-rd., Northolt, drainage to conveniences of Northolt Park Station, London & North Eastern Railway (C. F. Slade, District Engineer's Office, 7, York-rd., N.1); The Broadway, Ealing, alterations, 52, Gapps, Ltd. (builder, F. Secrett, 54, The Grove, Ealing, W.5); 2, Church-rd., Northolt, garage, Northolt Development Co., Ltd. (architects, Bradshaw, Brown & Co., Billiter-sq., E.C.3); Church-rd., Northolt, transformer chamber, Uxbridge and District Electric Supply Co., Ltd., Waterloo-rd., Uxbridge; Carlton-rd., conversion into flats of 14, for G. Stoddart (architects, Gordon Jackson & Lambert, 7, Great James-st., W.C.1); The Park, rebuilding of warehouse and alteration of flats, F. Allwright, 33, The Grove, Ealing, W.5; High-st., alterations to 24, L. C. Lamerton (architects, Moore-Smith & Colbeck, 14, Union-court, E.C.2); Rockware-av., boiler house, Rockware Glass Syndicate, Ltd. (architects, Hal Williams & Co., 43, Bedford-sq., W.C.1); Ealing-rd., Northolt, store at "The Swan," Watney, Combe, Reid & Co., Ltd. (architects, F. J. Fisher & Son, 35, John-st., Bedford-row, W.C.1); Castlebar-rd., extension of garage at The Elms, Mrs. L. S. Jones (architect, S. H. West, 40, The Broadway, Ealing, W.5); Claremont-rd., 44 garages, Brutonway, 28 garages, Fosse-way, 30 garages, Vallis-

* See also List of Contracts, Competitions, etc.

way, 8 garages, G. Wimpey & Co., Ltd., The Grove, W.6; Aboyne-rd., additions, Electrolio Meters Co., Ltd. (architect, H. H. Radburn, 33a, Broadway-chambs., Acton, W.3); The Green, alterations and additions at 8, J. W. Evans (architects, Hall-Jones & Dewhurst, Ealing); The Broadway, West Ealing, dispatch store at 60 and 62, F. H. Rowse, Ltd. (architects, Hall-Jones & Dewhurst, Ealing); Kent-av., 8 garages, Scotch-common, 2 garages, G. Wimpey & Co., Ltd., The Grove, W.6; Northfield-av., alterations at 60, H. Carrick (bunders, Morley & Sons, 25, Mortimer-rd., Kensal Rise, N.W.10); Northfield-av., alterations to 38, United Dairies (architect, F. T. Dear, 34, Palace-court, Bayswater, W.2); Brownlow-rd., alterations, Autotype Works, Autotype Co., Ltd. (architects, Hall-Jones & Dewhurst, Ealing); Uxbridge-rd., Hanwell, store and pot-house, "King's Arms" p.h., Mann, Crossman & Paulin, Ltd. (architects, F. J. Fisher & Son, 35, John-st., Bedford-row, W.C.1); Ruislip-rd., Greenford, 2 garages, P. Brown (architect, R. A. C. Churchward, 12, Victoria-st., Westminster, S.W.1).

East Barnet.—U.D.C. approved: 12 houses, Belmont-av., C. Winkley; 16 houses, Alverstone-rd., and 16 houses, Lovelace-rd., W. C. Leak & Sons.

Eastbourne.—T.C. approved: M. A. Thompson, per Scales & Baker, alterations and additions, "Park Gates Hotel," Compton-st.; G. Gower & Sons, Ltd., per F. C. Bens, 2 pairs of semi-detached houses, Moy-av.; H. Harvey, per P. D. Stenham & Son, workmen's club, Beresty-av.

Easingwold.—U.D.C. approved re-siting roads at Bishopstoke and Riversdale; extending posts at Burton Leversey; petition re Flaxton-park, sports ground; and small houses for aged people. P. G. Lee, S.

Easington.—Church hall to be erected on site on Church-lane and Chapel-lane, for vicar and Parochial Church Council, Christ Church.

Erith.—U.D.C. approved: 5 houses, Lower-rd., Belvedere, F. Holmer, per F. H. Jones.

Eton.—R.D.C. approved: 12 pairs of houses for E. Cotton, Ltd.

Failsworth.—Industrial Society, Ltd., Church-st., Newton Heath, Manchester, proposing dairy on land situated on Broadway, at £30,000. Architect's Department, Co-operative Wholesale Society, Ltd., Balloon-st., Manchester.

Finchley.—U.D.C. approved: 10 lock-up garages and one garage, Station-rd., W. Hollis, jun.; alterations, 109 and 111, High-rd., East Finchley, London Co-operative Society; 3 houses, Beechwood-av., Bolton & Norris; 11 houses, Creighton-av., E. N. Cansick; alterations and additions, shop premises, 5, Park-parade, N.12, J. Salmon.

Fleetwood.—Plans prepared for junior school by the County E.C. Architect. Tenders are to be invited.

Folkestone.—C.B. recommend land for more housing.—B.S. submitted plan of men's convenience proposed to be erected, near Harbour, at £400.—T.C. resolved that £400 be spent on improvements to bathing cabins at East Cliff.

Garstang.—County E.C. propose senior elementary Council school. Tenders to be invited.

Glasgow.—£50,000 alteration and addition scheme in Glasgow High school. Plans by Watson Salmond & Gray, architects, 2, West George-st.

Greenock.—Clubhouse for Greenock Police Sports and Recreation Club. D. L. Henderson, architect, housing director, Greenock.

Grimethorpe.—Miners' Welfare Committee propose pit-head baths, at £18,000. J. H. Forshaw, London.

Guildford.—T.C. approved: alterations and additions, Alexandra Laundry, E. V. Harris.

Hale.—Extensive extensions contemplated to "Wolf" garage, Ashley-rd, Hale. Plans by Brameld & Smith (Mr. Fred Riley, A.M.S.A., F.I.A.A.), County-bldgs., 4, Cannon-st., Manchester, for the Northern Automobile Co. Quantities by T. Sumner Smith, F.S.I., chartered quantity surveyor, Clifton Lodge, The Crescent, Victoria-pk., Manchester.

Harrogate.—T.C. to consider swimming pool at electricity works.—Managers of St. Peter's Church considering schools for senior, junior mixed and infant scholars.

Hebburn.—T. A. Page & Son, 67, King-st., South Shields, to prepare plans for 100 houses for U.D.C.

Herne Bay.—U.D.C. approved: 2 pairs of semi-detached villas, York-rd., S. Horwood, per Mr. E. J. Line.

High Wycombe.—T.C. approved:—Addition to shops, Totteridge-rd., Co-operative Society; alterations, Oxford-rd., Hull, Loosley & Pearce; addition to factory, Newlands, for J. Cheese & Sons.

Hillmorton.—Franklin & Newman, architects, 224, Regent-st., Rugby, prepared lay-out for houses on Fareham-av., for W. G. Hopkins.

Hoylake.—Mr. J. Jameson Green, F.R.I.B.A., 21, Harrington-st., Liverpool, prepared plans for parish church hall at Hoylake. Cost £6,000.

Hull.—Schemes, including new swimming baths, houses, and roads, to cost £400,000 been submitted to Corporation Finance Committee.

Keighley.—Tenders to be invited for extensions to Victoria-pk. Mills. No contracts have been placed. Architects, Moore & Crabtree, F.R.I.B.A., Moorgate-chams., Bradford.

Kettering.—Mr. G. H. Lewin, County Architect, Northampton, prepared plans for extensions to Poor Law Institution, London-rd.—Plans passed by T.C.: additions "Spring Gardens" inn, Northall-st., P. Phipps & Co., Ltd.

Kidderminster.—T.C. approved following schemes: rebuilding of Market-chams., High-st., £3,370; roofing of retail market (Worcester-st. annexe), £2,000; bandstand and lay-out of adjoining ground, £500; development of pools and open spaces at Sutton Farm estate, £1,600; further development of open air bathing pool, £800; new public baths, £20,000; restoration stonework at Cladwell Hall, costing £600. J. Hawcroft, B.S.

Kingussie.—T.C. to proceed with enlarging Victoria Hall, at £1,500.

Kirkstall.—Tenders invited for warehouse, factory and offices opposite "The Star and Garter Hotel" for the Thrift Stores, Ltd.

Lanarkshire.—Miners' institute. G. Arthur & Son, architects, 233, St. Vincent st., Glasgow.

Leyton.—T.C. approved: H. Wilson, 2 houses and 1 garage, 32 and 34, Shortlands-rd.; Robarts, Ltd., 6 houses, 3-13, St. Mary's-rd.

Lindsey.—C.C. approved £26,000 for Ashby senior girls' school; £11,100 for Council school at Scotter; £7,250 for a school at Bottesford.

Littleborough.—Rev. Brosnan and Council of St. Mary's Catholic Church proposing new parochial hall in Duke-st., Featherstall. Plans by Byrom & Noble, architects, 9, Victoria-buildings, Bury.

London.—C.C. approved following: St. Leonard's hospital—conversion of store room into pantry and formation of bath cubicles, £180; Bethnal Green hospital—chapel and formation of new gateway, etc., £600; Highgate-hill infirmary—enclosing bridges and operating theatre and installing bed-pan sluices and ward lavatory basins, £1,130; Orchard hospital—alterations to ward doors, etc., £340; St. Andrew's hospital—enlarging kitchen accommodation, construction of lavatories, etc., £600; Swaffield-rd. institution—conversion of cells into messroom, etc., £290; Barnsbury-st. relief offices, Islington—repairs and redecorations, £130.

London (Bermondsey).—B.C. to apply to L.C.C. for £9,700 for 16 flats, Gilkson-court area.—Council received application to £6,500 for housing at 204-212, Rotherhithe-st., and £32,770 for 48 flats at Page's-walk site.

London (Euston).—L.C.C. recommend £26,500 in respect of widening Euston-rd. between Gower-st. and Gordon-st.

London (Finsbury).—L.C.C. recommend borrowing by B.C. of £2,825 for depot purposes at rear of Eagle-court.

London (Hammersmith).—L.C.C. recommend borrowing by B.C. of £17,071 for housing purposes in Waterloo-st.

London (Lewisham).—B.C. approved: G. T. Harman, houses, Stillness-rd., Brockley; G. S. Stone, alterations to "Railway" Hotel, Railway-st., for B. M. Goodwin, sports pavilion and house, Trewsbury-rd.; J. W. Heath & Sons, 24 houses; T. A. Boughton, 4 houses, Thornsbeach-rd.—Council recommend to acquire premises known as "The Priory," in High-st., Lewisham, for £3,750.

London (Notting Hill).—L.C.C. recommend £106,500 in respect of widening of High-st., Notting Hill, and of Pembridge-rd.

London (Stepney).—L.C.C. recommend £135 for alterations to children's homes.

London (Westwich).—B.C. approved: Wm. Harbrow, Ltd., 214, Rotherhithe New-rd., S.E.16 (on behalf of W. F. Bette), 132 and 134, Eltham High-st., re-building and re-drainage of shop premises; S. W. Ackroyd, Commonwealth Buildings, Albion-rd., Woolwich, build and drain a milk receiving store at Commonwealth Buildings; Walters & Wood, 246, High-st., Lewisham, S.E. (on behalf of Hastings, Gale & Caught), Green-lane, Eltham, 3 garages to 3 houses; J. B. Farrugia, 46, Thomas-st., Woolwich (on behalf of F. Saunders), Southland-rd., Plumstead, 5, garages; Sykes & Pomfret, Eltham High-st., Eltham, Avery Hill-rd., Eltham, formation of roadway to garages and workshop at rear of 1, Avery Hill-rd.; Flood & Wright, 88, Greenvale-rd., Eltham, Glenlea-rd., Eltham, 4 houses.

Matlock.—U.D.C. approved 16 houses on site off Starkholme-rd. and 6 firemen's houses on site at back of Town Hall. Plans by S.

Newcastle-on-Tyne.—F. Marshall Dryden, 6, Market-st., to prepare plans for rebuilding "Ord Arms" p.h.; Cowgate, for Alexander Denchar, Ltd.

Northampton.—Law, Harris & Crofts, F.R.I.B.A., architects, 9, Gold-st., preparing plans for school at Denton, for Northants Education Committee.

Perth.—Plans in preparation for substantial block of buildings on site at corner of King Edward-st. and St. John's-place. There will be shops with large saloons and offices above.

Poole.—T.C. approved: 4 houses, Gorse Hill-rd., C. E. Maloney; 4 houses, Gorse Hill-rd., C. E. Maloney; 4 houses, Church-rd., K. Wilson; 4 pairs semi-detached houses and one house, off Ringwood-rd., C. G. G. Osborne, for H. Stanton; 18 houses, off Fernside-rd., Brailsford & Wood, Ltd.; 3 houses, Pine-av., S. G. Ward.

Portsmouth.—T.C. approved: C. V. Thorpe, 12 houses, off Tangier-rd.; G. & W. Mitchell, 33 houses, Highbury estate; R. J. Winnicott, 5 houses, Moneyfield-av.

Preston.—T.C. approved: J. W. Carwin (Carwin Electric Co.), offices and showrooms, Corporation-st.; J. F. Simpson, sub-station (Electricity Department), Abingdon-drive; G. Pemberton, offices and warehouse, Butler-st.; Barron & Crowther, alterations and additions, Bold-st.

Reigate.—T.C. approved: W. E. Tanner, 14 houses in Clarence-walk, Meadvale, Redhill.

Renfrew.—Garage for 30 motor buses, for Ferguson Bros., Victoria Motor Services. Architects, firm's own staff.

Rochdale.—E.C. acquired site at Greenhill, for secondary school for girls. Plans by S. H. Morgan, B.E.—Plans approved by Licensing Justices for alterations to "Railway" Hotel, Railway-st., for L.M. & S. Railway Co., Ltd.—Massey's Burnley Brewery, Ltd., proposing alterations and additions to "Industry" Hotel, Sladen-st. Plans by S. Taylor, F.R.I.B.A., architect, 74-78, Manchester-rd., Burnley.

Rotherham.—Portion of "Grapes" hotel to be converted into offices.—Proprietors of "Travellers Rest" p.h., Masbro-st., propose rebuilding and modernising buildings.

Rugby.—Warwickshire C.C. propose to erect extension lower school, at £4,500.—Plans approved for Rugby High School, at £29,000.

Salford.—T.C. recommend £625 in connection with reconstruction of railway bridge over Irwell-st.—E.C. recommended borrowing of £152,492 for transfer of Broughton Town Hall site from Town Halls and Markets Committee to E.C.; purchase of land at Lower Kersall and erection of two new school departments; three new school departments and clinics for school medical inspection and child welfare purposes on Broughton Town Hall site; crafts rooms and laboratories for girls at Blackfriars'-rd. Council school, and manual room, crafts room and laboratories for boys and crafts room and laboratory for girls at Seedley Council school.

Selby.—Funds being raised for children's ward at War Memorial Hospital.

Skipton.—S. prepared lay-out and plans for houses on Short Bank-rd. estate, for U.D.C.

Slough.—U.D.C. approved: 16 houses, off St. Paul's-av., H. D. Mines; 4 houses, Ragstone-rd., W. Varney; 4 houses, Ragstone-rd., G. W. Newitt; store shed, Farnham-rd., Rheostatic Co., Ltd.; 10 garages, Leeds-rd., West, H. Bishop; sub-station, Chadell-hill, Chalvey, Slough and District Electric Supply Co.

Southall.—Been decided to enlarge Western-rd. Council school to accommodate 200 children.

Southend-on-Sea.—C.B. approved: 4 houses and garages, Eaton-rd., J. P. O'Connor; 4 houses and 4 garages, Tankerville-drive, Bragg & Johnson; 9 houses and shops, London-rd., G. Martin; 3 houses, Eaton-rd., Miss L. Lewis; alterations and additions, 29-33, London-rd., corner of Burdett-av., London Co-operative Society, Ltd.; alterations and additions, 29-31, Alexandra-st., Bon Marche Co.; 3 houses, Cavendish-gardens, Fairfax-drive, Hart & McCrow; 4 houses, Earls Hall-av., Earls Hall Garden City estate, F. M. Wardill; 9 houses, Carlton-drive, A. R. Hook; 4 houses and stable, Westbury-rd., W. Gooch; 4 houses, Mayfield-av., G. F. Cattell; 11 garages, rear of Nelson-rd., C. P. Smith; 3 houses and garage, Woodgrange-drive, and 5 houses, Victoria-rd., Thorby Bros.; additions, Cripples' Home, 179-180, Eastern Esplanade, Cripples' Home Trustees (Wm. Strachan); 9 houses, Trinity-rd., C. W. Leswell; 6 shops and houses, Woodgrange-drive, A. W. B. Pitt; alterations, "Sutton Arms" p.h., 79, Southchurch-rd., Mann, Crossman & Paulin, Ltd.

Southport.—T.C. proposing to erect floral hall and gardens costing £20,000, and new band enclosure with ornamental bridge across Marine Lake, costing further £20,000.

Springhead.—U.D.C. propose 30 houses. Plans by Winder & Taylor, architects, 61, Union-st., Oldham.

Staines.—U.D.C. approved: Office, London-rd., Staines, L.G.O. Co.; additions, "Three Horse Shoes" public-house, Shepperton-rd., Laleham, Watney, Combe, Reid & Co.

Stockton.—T.C. to carry out slum clearance schemes in riverside and John-st. areas, affecting about 400 houses.

Swansea.—The Community of the Sisters of Nazareth, Nazareth House, Gower-rd., Sketty, acquired property known as Murton Grange, where new home is to be built to accommodate 170 boys and aged people.

Tadcaster.—R.D.C. propose erecting 40 houses at Tadcaster and 52 houses at Swillington. H. C. Wood, S.

Thrapston.—W. A. Lea, L.R.I.B.A., architect, 4, Market-hill, Huntingdon, preparing plans for offices at corner of Market-rd., for R.D.C.

Twickenham.—B.E. and S. to report upon application received from H. Merrylees for development of land situate between Richmond-rd. and Amyand-pk.-gardens, and on south-west side of Amyand-lane, for 14 houses, 2 shops, 10 flats and 10 garages.

Wembley.—U.D.C. approved: Piggott & Pickett, 10 houses, Medway-gardens; Vernon Estates, Ltd., 7 shops and flats, High-rd.; Midland Bank, Ltd., alterations and additions, 2, Court-parade, East-lane; H. J. Prachett, 6 additional houses, Elmstead-av.; Haymills, Ltd., 6 houses and garages, 7-11 and 8-12, Uxendon-crescent; W. Howell, 4 houses, Ravenscroft-av.; A. J. Cohen, 54 additional flats and 22 garages, Raglan-gardens; W. Cooke, 4 houses, Swinderby-rd.; Presbyterian Church Trustees, church hall, Woodcock Hill-lane; F. & C. Costin, church hall, Woodcock Hill-lane; F. & C. Costin, Ltd., 48 houses; F. & C. Costin, Ltd., 10 houses; F. & C. Costin, Ltd., 15 houses; P. Tice, new street and 22 houses, 20 in Forty-close and 2 in Forty-av.; W. J. Shirley & Co., 4 houses, The Rise.

L.M.B.A. Football League.

We give below results and table in this Football League to Saturday last November 1.

Results.

Downs	...	...	2	Scafco	 3
Higgs	...	...	3	Wills	 8
Portland	...	...	1	Trocoll	 4

Table.

	P.	W.	D.	L.	Goals F.	Goals A.	Pts.
Wills ...	5	5	—	—	32	6	10
Portland ...	6	4	1	1	16	9	9
Trocoll ...	6	3	2	1	31	8	8
Scafco ...	4	2	—	2	10	13	4
Higgs ...	4	1	1	2	13	15	3
Elsilrac ...	5	—	1	4	3	27	1
Downs ...	6	—	1	5	5	32	1

PRICES CURRENT OF MATERIALS.*

Owing to the exceptional circumstances which prevail at the present time, prices of materials should be confirmed by inquiry.

BRICKS, &c.

Per 1,000 Alongside, in River Thames up to London Bridge.

	£ s. d.
Best Stocks	4 3 6
Second Hard Stocks	3 18 6

Per 1,000. Delivered at London Goods Stations.

	£ s. d.		£ s. d.
Flettons, as	2 8 3		
King's Cross	2 12 3	Best Blue	9 5 0
Do., grooved for Plaster	2 14 3	Do. Bullnose	9 15 0
Do. Bullnose	2 17 3	Blue Wire Cuts	7 5 0
White Midhurst Facing Bricks (delivered London site)			5 0 0

Best Stourbridge Fire Bricks :—

2½ in.	8 11 0	3 in.	10 3 0

GLAZED BRICKS—

Best White Ivory and Salt Glazed Stretchers	27 0 0	D'ble Str'tch'rs	29 10 0
		D'ble Headers	28 10 0
		One side and two Ends	30 10 0
Headers	29 10 0	Two Sides and one End	31 10 0
Quoins, Bull-nose and 4½ in.		Splays, and Squints	28 0 0
Plate	27 10 0		

Second Quality, £1 per 1,000 less than best. Cream and buff, £2 extra over white. Other colours, Hard Glaze, £5 10s. extra over white.

BREEZE CONCRETE SLABS
Delivered London

	s. d.		s. d.
2 in. per yd. super.	1 11	3 in per yd super	2 9
2½ in. "	2 4	4 in. "	3 0

	s. d.		
Thames Ballast	9	per yd	
Pit Sand	12 6	"	delivered 2 miles radius Paddington.
Thames Sand	12 0	"	
Best Washed Sand	12 6	"	
½ in. Shingle for Ferro-Concrete	11 6	"	
¾ in.	12 0	"	
1 in. Broken Brick	11 6	"	
Fan Breeze	8 0	"	

Per ton delivered in London area in full van loads.
Best Portland Cement. British.
Standard Specification. Test £2 6 0 to £2 8 0
Per, alongside at Vauxhall in 80-ton lots.

Ferrocrete per ton extra on above	0 7 6
Vitrocrete " "	0 7 6
Super Cement (Waterproof)	3 16 0
Ciment Fondu (F.O.R. Works)	4 15 0
Roman Cement	3 15 0
Parian Cement	3 15 0
Keene's Cement, White	3 15 0
" " Pink	3 10 0
Plaster, Coarse, Pink	3 0 0
" " White	3 12 6
" Fine	3 12 6
Sirapite, Coarse	3 9 0
" Finish	3 17 0
Grey Stone Lime	2 10 9
Chalk Lime	2 10 9
Best Ground Blue Lias Lime	1 17 6
Hair	per cwt. 2 2 6
Granite Chippings	1 12 0

NOTE.—Sacks are charged 1s. 9d. each and credited 1s. 6d. if returned in good condition within three months carr. pd.
Stourbridge Fireclay in s'cks 37s. 0d. per ton at rly. dp.

STONE.

BATH STONE.—Delivered in railway trucks at Westbourne Park, Paddington, G.W.R., or South Lambeth, G.W.R., per ft. cube ..... s. d. 2 10

BEER STONE—RANSOM BLOCK—
Free on rail at Seaton Station per ft. cube 2 3
Delivered free on rail Nine Elms, S.R. per ft. cube 3 1½
Selected approximate size one way, 1d. per cubic foot extra; selected approximately three sizes or for special work, 3d. per cubic foot extra.

PORTLAND STONE—
Brown Whitbed, in random blocks of 20 ft. average, delivered in railway trucks at Nine Elms, S. Bly., South Lambeth Station, G.W.R., and Westbourne Park, Paddington, G.W.R., per ft. cube 4 4½
Do. do. delivered on road wagons at above stations, per ft. cube 4 5½
White basebed, 3d per ft. cube extra.
NOTE.—1d. per ft. cube extra for every foot over 20 ft *average*, and ½d. beyond 30 ft.

HOPTON-WOOD STONE.—
F.O.R. Quarries, Wirksworth Derbyshire. s. d.
Random blocks from 10 ft. and over F. ft. cb. 1 4 0
Sawn two sides " " 22 6
Sawn three or four sides " " 27 6

YORK STONE, BLUE—*Robin Hood Quality*.
Delivered at any Goods Station, London.
6 in. sawn two sides landings to sizes (under 30 ft. super) ..... Per ft. super 5 6
6 in. rubbed two sides, ditto ..... " 6 0
3 in. sawn two sides slabs (random sizes) " 2 3½
2 in. to 2½ in. sawn one side slabs (random sizes) ..... " 1 6½
1½ in. to 2 in. ditto, ditto ..... " 1 3½

HARD YORK—
Delivered at any Goods Station, London.
Scappled random blocks ..... Per ft. cube 6 3
6 in. sawn two sides landing to sizes (under 40 ft. super) ..... Per ft. super 5 1½
6 in. rubbed two sides, ditto ..... " 6 1½
4 in. sawn two sides slabs (random sizes) .. " 2 1½
3 in. ditto ditto " 2 10
2 in. self-faced random flags ..... Per yd. super 8

CAST STONE

Delivered in London area in full van loads, per ft. cube: Plain, 6s. 6d.; Moulded, 7s. 6d.: Cills, 10s. 0d

WOOD.

GOOD BUILDING DEAL.

Inches.	per stan.	Inches.	per stan.
4 × 11	£27 10	3 × 6	£21 0
4 × 9	28 0	3 × 11	25 0
4 × 8	25 0	2 × 11	20 0
4 × 7	23 0	3 × 9	24 0
3 × 8	22 0	2½ × 9	24 0
3 × 7	22 0	3 × 4½	21 0
2½ × 7	21 0	3 × 4	21 0

PLANED BOARDS.

1 × 11	£30 0

PLAIN EDGE FLOORING

Inches.	per sq.
⅝	18/-
¾	21/-
1	24/-

TONGUED AND GROOVED FLOORING

Inches.	per sq.
1	24/-
1¼	30/-
1½	34/-

Ins. BATTENS	s. d.
¾ × 2 ..... per 100 ft.	2 6

Inches.	per sq.
1½	30/-
1¾	34/-

MATCHING (BEST).

Inches.	per sq.
⅝	16/6
¾	19/-
1	24/-

SAWN LATHS. s. d.
Per bundle 2 6

1 INCH AND UP THICK.

Average price for prime quality.	£ s. d.
Dry Austrian Walnut, per ft. cube	0 15 0
Dry American and/or Japanese Figured Oak, per ft. cube	0 12 0
Dry American and/or Japanese plain Oak, per ft. cube	0 10 0
Dry sq. edged Honduras Mahogany, per ft. cube	0 14 0
Dry log-cut Honduras Mahogany, per ft. cube	0 16 0
Dry Cuba Mahogany, per ft. cube	1 1 0
Dry Teak, per ft. cube	0 14 0
Dry American Whitewood, per ft. cube	0 10 0
Best Scotch Glue, per cwt.	£4 10 0 to —
Liquid Glue, per cwt.	4 7 0 to 5 10 0

SLATES

First quality slates from Bangor or Portmadoc carriage paid in full truck loads to London Rate Station. Per 1,000 actual.

	£ s. d.		£ s. d.
24 by 12	31 0 0	18 by 10	17 5 0
22 by 12	27 19 6	18 by 9	15 10 0
22 by 11	25 5 0	16 by 10	14 14 6
20 by 12	24 7 6	16 by 8	11 5 0
20 by 10	20 17 6		

TILES.

Delivered at London rate stations in full truckloads of not less than 6 tons. Per 1,000. L.o.r., London.

Best machine-made tiles from Broseley or Staffordshire district	£5 2 6
ditto hand-made ditto	5 7 6
Ornamental ditto	5 12 6
Hip and valley tiles (per dozen) { Hand-made	0 9 6
{ Machine-made	0 9 0

METALS.

JOISTS, GIRDERS, &c., TO LONDON STATION, PER TON—

R.S. Joists, cut and fitted	£12 10 0
Plain Compound Girders	14 10 0
" Stanchions	16 10 0
In Roof Work	19 10 0

MILD STEEL ROUNDS.—To London Station, per ton

Diameter.	£ s. d.	Diameter.	£ s. d.
½ in.	12 0 0	⅝ in. to ¼ in.	10 15 0
⅜ in.	11 0 0	½ in. to 2½ in.	10 10 0

WROUGHT-IRON TUBES AND FITTINGS—
(Discount off List for lot of not less than £7 net value delivered direct from Works, 2½ per cent. less above gross discounts, carriage forward, if sent from London Stocks.)

	Tubes. Wrought Mild Steel.	Tubes. Genuine Staffs. Iron.	Fittings. ½ in. and under.	Fittings. Over ½ in.	Flanges. ½ in. and under.	Flanges. Over ½ in.
	%	%	%	%	%	%
Gas	65	52½	45	47½	55	57½
Water	61½	48½	40	42½	50	52½
Steam	57½	45	35	37½	45	47½
Galv. gas	52½	40	35	37½	45	47½
Galv. water	47½	35	30	32½	40	42½
Galv. steam	42½	30	25	27½	35	37½

*C.I.—HALF-ROUND GUTTERS—London Prices ex Works

Per yd. in 6 ft. lengths.	Gutters.	Angles and Nozzles.	Stop Ends.
3 in.	10d.	7½d.	2½d.
3½ in.	10½d.	8½d.	2½d.
4 in.	10½d.	9½d.	2½d.
4½ in.	11½d.	10½d.	2½d.
5 in.	1/1½	11½d.	3½d.

*O.G. GUTTERS.

3 in.	1/0	10½d.	2½d.
3½ in.	1/0½	10½d.	2½d.
4 in.	1/1½	10½d.	2½d.
4½ in.	1/2½	1/-	2½d.
5 in.	1/5	1/2½	3½d.

*RAIN-WATER PIPES, &c.

Per yd. in 6 ft.	Pipe.	Bends, stock angles.	Branches, stock angles.
2 in. plain	1/2½	9½d.	1/2
2½ in. "	1/5	10½d.	1/4½
3 in. "	1/6½	1/1½	1/6½
3½ in. "	1/11	1/4½	1/11½
4 in. "	2/2½	1/7½	2/4½

*The above R.W. Goods prices are subject to an advance of 5% from October 29th, 1929.

L.C.C. COATED SOIL PIPES—London Prices ex Works.

	Pipe.	Bends, stock angles.	Branches, stock angles.
	s. d.	s. d.	s. d.
2 in. per yd. in 6 fts. plain	2 5	1 9	2 1
2½ in. "	2 9½	1 10½	2 7
3 in. "	3 0	2 1	3 1
3½ in. "	3 3	2 7	3 7
4 in. "	3 8	2 11	4 1½

L.C.C. COATED DRAIN PIPES—London Prices ex Works

	Bends, stock Branches. Pipe, angles, stock angles.
	s. d.
3 in. per yd. in 9ft. lengths	3 6
4 in. " "	4 8
5 in. " "	6 3
6 in. " "	7 3

	s. d.	s. d.
3 in. per yd. in 9ft. lengths	3 6	4 6 7 0
4 in. " "	4 8	5 5 9 3
5 in. " "	6 3	9 6 15 0
6 in. " "	7 3	1 6 19 0

Gasket for jointing, 41/- per cwt.

IRON—	Per ton in London. £ s. d.		£ s. d.
Common bars	11 0 0	to	12 0 0
Staffordshire Crown Bars—Good merchant quality	11 5 0	to	12 5 0
Staffordshire Marked Bars	14 0 0	...	15 0 0
Mild Steel Bars	9 10 0	...	10 10 0
Steel Bars, Ferro-Concrete quality, basis price	9 0 0	...	10 0 0
Hoop iron, basis price	11 0 0	...	12 0 0
" Galvanised	27 0 0	...	28 0 0
Soft Steel Sheets, Black—Ordinary sizes, to 20 g.	11 10 0	...	12 0 0
" " " 24 g.	13 0 0	...	14 0 0
" " " 26 g.	15 0 0	...	16 0 0
Sheets Flat Best Soft Steel, C.R. and C.A. quality—Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 20 g.	14 10 0	...	15 10 0
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 22 g. and 24 g.	15 10 0	...	16 10 0
Ordinary sizes, 6 ft. by to 8 ft. to 22 g.	18 10 0	...	19 5 0
No. 1 quality £4 per ton extra.			
Flat and Galvanised Corrugated Sheets—Ordinary sizes, 6 ft. to 9 ft. to 20 g.	15 0 0	...	16 0 0
Ordinary sizes, 6 ft. to 9 ft. to 22 g. and 24 g.	15 10 0	...	16 10 0
Ordinary sizes, 6 ft. to 9 ft. to 26 g.	18 10 0	...	19 10 0
Sheets Galvanised Flat, Best quality—Best Soft Steel Sheets, 6 ft. by 2 ft. to 3 ft. to 20 g. and thicker	20 10 0	...	21 10 0
Best Soft Steel Sheets, 22 g. and 24 g.	22 10 0	...	24 10 0
Best Soft Steel Sheets, 26 g.	24 0 0	...	25 0 0
Cut Nails, ½ in. to 6 in.	16 0 0	...	17 0 0

Under 3 in. usual trade extras.)

METAL WINDOWS.—Standard sizes, suitable for complete houses, including all fittings, painting two coats, and delivery to job, average price about 1s. 4d. to 1s. 7d. per foot super.

LEAD, &c.

(Delivered in London.)	£ s. d.
LEAD—Sheet, English, 4 lb. and up	23 0 0
Pipe in coils	25 10 0
Soil pipe	28 10 0
Compo pipe	29 10 0

NOTE.—Country delivery, 20s. per ton extra; lots under 2 cwt. 3s. per cwt. extra, and over 3 cwt. and under 5 cwt., 1s. 6d. per cwt extra. Cut to size, 5s. cwt. extra.

Old lead, ex London area, at Mills ..... per ton } £14 10 0

COPPER.

	s. d.
Seamless Copper tubes (basis) ..... per lb.	1 5
Strong sheet ..... "	1 0
Thin ..... "	1 1
Copper nails ..... "	1 7
Copper wire ..... "	1 4

PLUMBERS' BRASS WORK.
Delivered in London.

NEW RIVER PATTERN SCREW DOWN BIB COCKS FOR IRON.

½ in. ¾ in. 1 in. 1¼ in. 1½ in. 2 in.
29/- 45/- 76/- 153/- 246/- 510/- per doz.

NEW RIVER PATTERN SCREW DOWN STOP COCKS AND UNIONS.

½ in. ¾ in. 1 in. 1¼ in. 1½ in. 2 in.
41/6 62/- 92/- 174/- 300/- 588/- per doz.

RIVER PATTERN SCREW DOWN MAIN FERRULES.

½ in. ¾ in. 1 in.
30/6 60/- 116/6 per doz

CAPS AND SCREWS.

1¼ in. 1½ in. 2 in. 3 in. 3½ in. 4 in.
7/6 10/- 14/- 23/- 30/- 42/- per doz.

DOUBLE NUT BOILER SCREWS.

½ in. ¾ in. 1 in. 1¼ in. 1½ in. 2 in.
/6 11/- 17/- 29/- 36/- 63/- per doz.

BRASS SLEEVES.

1½ in. 2 in. 3 in. 3½ in. 4 in.
10/- 12/- 20/- 24/- 31/- per doz.

NEW RIVER PATTERN CROYDON BALL VALVES, S.F.

½ in. ¾ in. 1 in. 1¼ in. 1½ in.
35/- 56/- 98/- 162/- 228/- per doz.

DRAWN LEAD P. & S. TRAPS WITH BRASS CLEANING SCREW.

1¼ in. 1½ in. 2 in. 3 in.
8 lbs. P. traps ... 33/- 41/- 56/- 101/- per doz.
8 lbs. S. traps ... 35/- 45/- 66/- 126/- "

TIN.—English Ingots, 1/11 per lb. SOLDER.—Plumber's 9d., Tinmen's 11d, Blowpipe 1/- per lb.

PAINTS, &c.

Raw Linseed Oil, in pipes	per gallon	0	2 10
" " " in barrels ...	"	0	3 0
" " " in drums ...	"	0	3 3
Boiled " " in barrels ...	"	0	3 3
" " " in drums ...	"	0	3 5
Turpentine in barrels	"	0	3 6
" in drums (10 gals)	"	0	3 7
Genuine Ground English White Lead, per ton		48	0 0

(In not less than 5-cwt. casks.)
Extra for 1-cwt. kegs over 5-cwt. casks is 5/0 cwt.

* The information given on this page has been specially compiled for THE BUILDER, and is copyright. The aim in this list is to give, as far as possible, the *average* prices of materials, not necessarily the highest or lowest. Quality and quantity obviously affect prices—a fact which should be remembered by those who make use of this information.

PRICES CURRENT OF MATERIALS—(*cont.*)

PAINTS, &c.—(*cont.*)

GENUINE WHITE LEAD PAINT.

"Father Thames." "Nine Elms," "Park," "Supremus," "St. Paul's," "Morganswyte," "Polacco," "J" Brand, and other best brands (in 14-lb. tins) not less than 5 cwt. lots per ton delivered... £ 66 s. 10 d. 0

Red Lead, Dry (packages extra) ...	per ton	37	0 0
Best Linseed Oil Putty	per cwt.	0	15 6
Pillcol	"	0	16 6
Sim. XD quality	fkn.	0	3 0

GLASS.

ENGLISH SHEET GLASS IN CRATES OF STOCK SIZES.

Per ft.		Per ft.
15 oz. fourths ... 2¼d.	32 oz. fourths	6½d.
15 „ thirds ... 3d.	32 „ thirds.....	9d.
21 „ fourths ... 3½d.	Obscured Sheet, 15 oz. ...	3½d.
21 „ thirds..... 4½d.	„ „ 21 oz. ...	4½d.
26 „ fourths ... 4½d.	Fluted, 15 oz. 7d., 21 oz.	9½d.
26 „ thirds..... 6½d.	Em'lled, 15 oz. 4½d., 21 oz.	6d.

Extra price according to size and substance for squares cut from stock.

ENGLISH ROLLED plate in CRATES OF STOCK SIZES. Per ft.

¼ Rolled plate	4½d.
⅜ Rough rolled	5½d.
Rough rolled	5½d.
Figured Rolled, Baltic, Oceanic, Arctic, Stippolyte, and small and large Flemish White...	5½d.
Ditto, tinted	8½d.
Rolled Sheet	4½d.
White Rolled Cathedral	5d.
Tinned do.	7d.

Cast plate is same price as rough rolled.

"VITA" GLASS. Per foot s. d.

Clear sheet—not exceeding 1 foot	1	0
Do. do. 2 feet	1	3
Do. over 2 feet	1	9
Polished plate—not exceeding 1 foot	1	6
Do. not exceeding 2 feet	3	0
Cathedral—not exceeding 1 foot	1	0
Do. larger sizes	1	6
Horticultural—for greenhouses, etc. Sizes up to 24 inches by 18 inches or not exceeding 3 feet	1	0
3/16 in. Wired Georgian Design. Sizes up to 108 inches long by up to 24 inches wide ...	2	6

ULTRA VIOLET RAY GLASS.

RAYLITE.

Up to 2 sq. ft. 1/-. Up to 4 sq. ft. 1/2. Up to 8 sq. ft. 1/3.

FOREIGN.

HORTITEX (HORTICULTURAL).

Up to 1 sq. ft. 7d. Up to 2 sq. ft. 8d. Up to 3 sq. ft. 9d. (Not exceeding 24 in. by 18 in.)
Up to 4 sq. ft. 10d. Up to 8 sq. ft. 11d

VARNISHES, &c.

		Per Gallon £	s.	d.
Oak Varnish	Outside	0	14	0
Fine ditto	ditto	0	16	0
Fine Copal.....	ditto	0	18	0
Pale Copal.....	ditto	1	0	0
Pale Copal Carriage	ditto	1	4	0
Best ditto	ditto	1	12	0
Floor Varnish	Inside	0	18	0
Fine Pale Paper	ditto	0	18	6
Fine Copal Cabinet	ditto	1	2	6
Fine Copal Flatting.....	ditto	1	0	0
Hard Drying Oak	ditto	0	18	0
Fine Hard Drying Oak	ditto	0	19	6
Fine Copal Varnish	ditto	1	0	0
Pale ditto	ditto	1	12	6
Best ditto	ditto	1	2	6
Best Japan Gold Size.....		0	12	0
Best Black Japan		0	10	0
Oak and Mahogany Stain (water)		0	12	0
Brunswick Black		0	7	0
Berlin Black		0	14	0
Knotting (patent)		1	5	0
French and Brush Polish		0	17	0
Liquid Dryers in Terebene		0	9	6
Cuirass Black Enamel.....		0	7	0

Workmen's Dwellings, Slough.

Slough Council invite builders to submit plans and particulars of about 50 houses which they would be prepared to build at a cost not exceeding £300 each on three acres of land at the rear of existing houses in Elliman-avenue and Stoke-road. The houses should have three bedrooms and a bathroom, and may be built in blocks or rows, the above cost to include paths and drainage. The Council will construct the roads and sewers and carry out all fencing work. A site plan showing lay-out of roads may be obtained from, and sealed offers, endorsed "Workmen's Dwellings," should be delivered to, Mr. Alan Bromly, A.M.I.C.E., Surveyor, Council Offices, William-street, Slough, on or before twelve noon on Friday, November 7. In the event of a satisfactory development of this small site, the Council may entertain schemes for the provision of a large number of small houses within the urban district.

THE SCOTTISH BUILDER

NEW BUILDINGS

The Editor would be glad to receive information for publication under this heading from architects, builders, or other persons concerned. Items should be received at THE BUILDER *Office not later than Tuesday evening.*

Dundee. — HOSTEL. — Messrs. Gauldie, Hardie & Sharpe, 26, Commercial-street, are the architects for a new hostel to be erected at Mayfield, for the National Committee for the Training of Teachers.

Edinburgh. — BUILDING. — The Dean of Guild Court granted the following warrants :—Commissioners of H.M. Works and Public Buildings—extension at 19, Grange-terrace; and John Croall & Sons, Ltd.—alterations at Royal Horse Bazaar, Castle-terrace.

Elgin.—RESERVOIR.—Elgin Town Council have resolved to construct a new water reservoir with a storage capacity of over 1,000,000 gallons, at an estimated cost of £7,065.

Oich.—BRIDGE.—The Inverness-shire Council has placed a contract for the construction of the Oich bridge with Messrs. Melville, Dundas & Whitson, 224, St. Vincent-street, Glasgow, C.2, at £28,615. Mr. Robert Bruce is the supervising engineer.

Stranraer.—SCHOOLS.—The Wigtown E.C. has announced that a Stranraer schools scheme, valued at £22,500, is proposed. This includes the enlargement and reconstruction of Sheuchan school, £8,500; and reconstruction and enlargement of Lewis-street school, £9,500.

The Extension of Cambridge.

The Cambridge Town Council has decided unanimously to apply for power under Section 36 of the Local Government Act, 1929, for the extension of the borough boundaries. The proposal is to include within the borough the villages of Histon, Minton, Great Shelford, Barton, Girton, Trumpington, Grantchester, and Cherry Hinton.

The Year's Building, Edinburgh.

For the year ending October 10 there were 556 full petitions and 1,179 minor applications sanctioned by Edinburgh Dean of Guild, amounting to £2,163,815, as compared with £2,172,336 in the previous year. Warrant was granted for 843 self-contained houses and 646 tenement houses, a total of 1,489. The former were practically all erected by private enterprise and the latter by the Corporation. In both cases the increase on last year, when the total was 983, was quite appreciable. The more important buildings dealt with were geology and engineering blocks for the University at Mayfield-road and extensive alterations at Teviot-place; several new schools, including a physical department for George Watson's School, and extensions to the City Chambers.

BUILDING TRADE WAGES IN SCOTLAND*

The following are the present rate of wages in the building trade in the principal towns of Scotland. Every endeavour is made to ensure accuracy, but we cannot be responsible for errors that may occur.

	Masons.	Bricklayers.	Carpenters, Joiners.	Plasterers.	Slaters.	Plumbers.	Painters.	Labourers—Masons'‡ Bricklayers'† Plasterers'.†
Aberdeen	1/7	1/7	1/7	1/8	1/7	1/7	1/8	1/2½
Airdrie	1/7	1/7	1/7	1/8	1/7	1/7	1/8	‡1/2½ †1/2½
Alexandria	1/7	1/7	1/7	1/8	1/7	1/7	1/8	‡1/2½ †1/2½
Arbroath	1/6	1/6	1/6	1/7	1/6	1/6	1/7	1/1
Ayrshire	1/7	1/7	1/7	1/8	1/7	1/7	1/8	1/2½
Bathgate	1/7	1/7	1/7	1/8	1/7	1/7	1/8	1/2 1/3
Brewickshire	1/6	1/6	1/6	1/7	1/6	1/6	1/7	1/1½
Bo'ness	1/7	1/7	1/7	1/8	1/7	1/7	1/8	†1/2½
Broughty Ferry	1/7	1/7	1/7	1/8	1/7	1/7	1/8	‡1/2½ †1/2½
Clackmannanshire	1/7	1/7	1/7	1/8	1/7	1/7	1/8	1/2½
Coatbridge	1/7	1/7	1/7	1/8	1/7	1/7	1/8	‡1/2½ †1/2½
Dumbartonshire	1/7	1/7	1/7	1/8	1/7	1/7	1/8	1/2½
Dumfries	1/6	1/6	1/6	1/7	1/6	1/6	1/7	1/1
Dumfriesshire	1/6	1/6	1/6	1/7	1/6	1/6	1/7	1/1½
Dundee	1/7	1/7	1/7	1/8	1/7	1/7	1/8	1/2½
Dunfermline	1/7	1/7	1/7	1/8	1/7	1/7	1/8	1/2½
Dunoon	1/7	1/7	1/7	1/8	1/7	1/7	1/8	1/2½
East Lothian	1/7	1/7	1/7	1/8	1/7	1/7	1/8	1/2½
Edinburgh	1/7	1/7	1/7	1/8	1/7	1/7	1/8	1/2½
Falkirk	1/7	1/7	1/7	1/8	1/7	1/7	1/8	1/2½
Forfarshire	1/6	1/6	1/6	1/7	1/6	1/6	1/7	1/1½
Fort William	1/6	1/6	1/6	1/7	1/6	1/6	1/7	1/2
Galashiels	1/6	1/6	1/6	1/7	1/6	1/6	1/7	1/1
Glasgow	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	1/2½
Greenock	1/7	1/7	1/7	1/8	1/7	1/7	1/8	1/2½
Hamilton	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8½	‡1/2½ †1/2½
Hawick	1/6	1/6	1/6	1/7	1/6	1/6	1/7	1/1
Helensburgh	1/7	1/7	1/7	1/8	1/7	1/7	1/8	‡1/2½ †1/2½
Inverness	1/6	1/6	1/6	1/7	1/6	1/6	1/7	1/1 1/2
Inverurie	1/6½	1/6½	1/6½	1/7½	1/6½	1/6½	1/7½	1/2
Kilmarnock	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	1/2½
Kincardineshire	1/6	1/6	1/6	1/7	1/6	1/6	1/7	1/1
Kinross-shire	1/7	1/7	1/7	1/8	1/7	1/7	1/8	1/2½
Kirkcaldy	1/7	1/7	1/7	1/8	1/7	1/7	1/8	1/2½
Kirkwall	1/5	1/5	1/5	1/6	1/5	1/5	1/6	1/-
Lanarkshire	1/7	1/7	1/7	1/8	1/7	1/7	1/8	1/2½
Leith	1/7	1/7	1/7	1/8	1/7	1/7	1/8	1/2½
Midlothian	1/7	1/7	1/7	1/8	1/7	1/7	1/8	1/2½
Motherwell	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8½	‡1/2½ †1/2½
Peeblesshire	1/6	1/6	1/6	1/7	1/6	1/6	1/7	1/1
Perth	1/7	1/7	1/7	1/8	1/7	1/7	1/8	1/2½
Perthshire	1/6	1/6	1/6	1/7	1/6	1/6	1/7	1/1½
Peterhead	1/6½	1/6½	1/6½	1/7½	1/6½	1/6½	1/7½	1/2
Renfrewshire	1/7	1/7	1/7	1/8	1/7	1/7	1/8	1/2½
Rothesay	1/7	1/7	1/7	1/8	1/7	1/7	1/8	1/2½
Roxburghshire	1/6	1/6	1/6	1/7	1/6	1/6	1/7	1/1½
St. Andrew's	1/7	1/7	1/7	1/8	1/7	1/7	1/8	1/2½
Selkirkshire	1/6	1/6	1/6	1/7	1/6	1/6	1/7	1/1
Stirling	1/7	1/7	1/7	1/8	1/7	1/7	1/8	‡1/2½ †1/2½
Stirlingshire, West	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Stornoway	1/6	1/6	1/6	1/7	1/6	1/6	1/7	1/1
West Lothian	1/7	1/7	1/7	1/8	1/7	1/7	1/8	1/2½
Wishaw	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8½	‡1/2½ †1/2½

* The information given in this table is copyright. The rates of wages in the various towns in England and Wales are given on page 803.

CURRENT PRICES FOR BUILDING WORK IN LONDON*

EXCAVATOR.

		s.	d.
Digging and throwing or wheeling and filling carts, and carting away to shoot—6 ft. deep	per yard cube	11	0
Add if in clay	" "	1	0
Add for every additional depth of 6 ft.	" "	0	6
Planking and strutting to trenches	per foot super	0	5
Do. to sides of excavation, including shoring	" "	1	0

CONCRETOR.

		s.	d.
Portland cement concrete in foundation 1 to 6	per yard cube	38	0
Add if in underpinning in short lengths	" "	7	0
Add if in floors 6 in. thick	" "	3	3
Add if in beams	" "	3	9
Add if aggregate 1 : 2 : 4	" "	10	0
Add for hoisting not exceeding 10 ft. beyond the first 10 ft.	" "	2	6

BRICKLAYER.

		£	s.	d.
Reduced brickwork in lime mortar and Flotton bricks	per rod	32	0	0
Add if in stocks	"	7	10	0
Add if in Staffordshire blues	"	22	0	0
Add if in Portland cement and sand	"	1	10	0

FACINGS.

		s.	d.
Extra for facing in English or Flemish bond for every 10s. per 1,000 over the price of the common bricks	per ft. super	0	0	1½

POINTING.

		s.	d.
Neat flat struck or weathered joint	" "	0	0	3

ARCHES.

		s.	d.
Extra only to the price of ordinary brickwork :—			
Fair external in half brick rings	" "	0	0	10
Axed in stocks	" "	0	1	9
Rubbed and gauged jointed in putty camber or segmental	" "	0	6	0

SUNDRIES.

		s.	d.
Damp course in double course of slates breaking joint and bedded in Portland cement	" "	0	1	0
Setting ordinary register grates and stoves	each	1	0	0
Setting kitchener, including forming flues, &c., with all necessary fire bricks	"	4	15	0

ASPHALTER.

		s.	d.
Half-inch horizontal damp course	per yard super	4	6
Three-quarter-inch vertical damp course	" "	9	6
Three-quarter-inch on flats in two thicknesses	" "	6	3
Angle fillet	per foot run	0	3
Skirting and fillet 6 in. high	" "	1	2

MASON.

		s.	d.
York stone templates fixed	per foot cube	13	0
York stone sills fixed	" "	22	0
Bath stone and all labour fixed	" "	10	6
Beer stone and all labour fixed	" "	15	0
Portland stone fixed	" "	20	0

SLATER.

		s.	d.
Welsh 16 in. × 8 in. 3 in. lap, including nails	per square	72	9
Do. 20 in. × 10 in. Do. Do.	"	80	9
Do. 24 in. × 12 in. Do. Do.	"	90	0

CARPENTER AND JOINER.

		s.	d.
Fir framed in plates	per foot cube	5	0
Do. joists	" "	5	6
Do. roofs, floors and partitions	" "	6	0
Do. trusses	" "	8	6

		¾"	1"	1¼"	2"
Deal rough close boarding	per sq.	35/6	40/-	45/-	72/-
Flat centering for concrete floor, including struts or hangers	"				50 0
Do. to beams	per ft. sup.				0 11
Centre for arches	"				1 6
Gutter boards and bearers	"				1 0

FLOORING.

		¾"	1"	1¼"	1½"
Deal edges shot	per sq.	—	44/6	53/-	60/6
Do. tongued and grooved	"	—	49/-	57/6	65/-
Do. matchings	"	45/-	51/-	—	—
Moulded skirting, including backings and grounds	per ft. sup.	1/6	1/9	2/-	2/6

SASHES AND FRAMES.

		s.	d.
One-and-a-half moulded sashes or casements	per foot super	1	10
Two Do. Do. Do.	" "	2	1
Add for fitting and fixing	" "	0	3
Deal-cased frames with 1 in. inner and outer linings, 1¼ in. pulley stiles tongued to linings, hard wood sills with 2 in. moulded sashes in squares double hung, double hung with pulleys, lines and weights : average size	" "	3	9

DOORS.

		1½"	1¾"	2"
Two-panel square framed	per ft. sup.	2/1	2/4	2/6
Four-panel Do.	"	2/5	2/8	2/11
Two-panel moulded both sides	"	2/8	2/11	3/2
Four-panel Do. Do.	"	2/11	3/2	3/5

CARPENTER AND JOINER—continued.

FRAMES.

		s.	d.
Deal wrot moulded and rebated	per foot cube	14	0

		1"	1¼"	1½"
Plain deal jamb linings framed	per ft. sup.	1/7	1/8	1/11
Deal shelves and bearers	"	1/4	1/6	1/9
Add if cross-tongued	"	2d.	2d.	2d.

STAIRCASES.

		1"	1¼"	1½"	2"	2½"
Deal treads and risers in and including rough brackets		2/1	2/4	2/9	—	—
Deal strings wrot on both sides and framed		1/8	2/-	2/2	2/8	—

		s.	d.
Housings for steps and risers	each	0	11
Deal balusters, 1 in. × 1¼ in.	per ft. run	0	9
Mahogany handrail : average, 3 in. × 3 in.	" "	6	0
Add if ramped	" "	12	0
Add if wreathed	" "	24	0

FIXING ONLY IRONMONGERY (INCLUDING SCREWS).

6 in. barrel bolts	8½d.	Rim locks	2/-
Sash fasteners	11½d.	Mortice locks	4/6
Casement fasteners	1/5	Patent spring hinges and letting into floor and making good	19/-
Casement stays	1/2		
Cupboard locks	1/5		

FOUNDER AND SMITH.

		s.	d.
Rolled steel joists	per cwt.	16	3
Plain compound girders	"	19	0
Do. stanchions		21	9
In roofwork	"	27	6

RAIN-WATER GOODS.

		3"	4"	5"	6"
Half-round plain rebated joints	ft. run	1/6	1/9	2/-	2/6
Ogee Do. Do.	"	1/9	2/-	2/6	3/3
Rain-water pipes with ears	"	1/9	2/7	—	—
Extra for shoes and bends	each	4/4	5/11	—	—
Do. stopped ends	"	1/11	2/4½	3/7	4/-
Do. nozzles for inlets	"	2/2	2/7	3/10	4/3

PLUMBER.

		s.	d.
Milled lead and laying in flashings and gutters	per cwt.	44	0
Do. Do. in flats	"	43	0
Extra labour and solder in coated cesspools	each	6	9
Welt joint	per ft. run	0	6
Soldered seam	" "	1	3
Copper nailing	" "	0	3

		½"	¾"	1"	1½"	2"	4"
Drawn lead waste	per ft. run	1/2	1/9	2/-	3/4	4/-	—
Do. service	"	1/8	2/2	2/7	3/10	—	—
Do. soil	"	—	—	—	—	—	6/9
Bends in lead pipe	each	—	—	—	—	3/3	8/2
Soldered stop ends	"	1/2	1/8	2/1	2/10	3/6	—
Red lead joints	"	11d.	1/-	1/3	1/11	2/4	4/10
Wiped soldered joints	"	2/10	3/6	4/-	4/11	6/6	9/9
Lead traps and cleaning screws	"	—	—	—	14/7	19/6	—
Bib cocks and joints	"	6/4	9/7	15/4	41/-	—	—
Stop cocks and joints	"	15/4	17/2	25/8	64/-	—	—

PLASTERER.

		s.	d.
Render, float and set in lime and hair	per yard sup.	2	6
Do. Do. Sirapite	" "	2	9
Do. Do. Keen's	" "	4	0
Add saw lathing	" "	1	7
Add metal lathing	" "	2	6
(Not including hangers or runners, etc. for suspended ceilings.)			
Portland cement screed	" "	2	2
Do. plain face	" "	3	3
Mouldings in plaster	per 1 girth	0	1½
One-and-a-half granolithic pavings	per yard sup.	5	6

GLAZIER.

		s.	d.
21-oz. sheet plain	per foot sup.	0	8½
26-oz. Do.	" "	1	0
Obscured sheet	"	1	1
¼-in. rolled plate	" "	0	9
¼-in. rough rolled or cast plate	" "	0	10½
¼-in. wired cast plate	" "	1	4

PAINTER.

		s.	d.
Preparing and distempering, 2 coats	per yard sup.	0	9
Knotting and priming	" "	0	7
Plain painting, 1 coat	" "	0	9
Do. 2 coats	" "	1	2
Do. 3 coats	" "	1	9
Do. 4 coats	" "	2	4
Graining	" "	2	3
Varnishing twice	" "	1	9
Sizing	" "	0	3
Flatting	" "	0	7
Enamel	" "	1	1
Wax polishing	per foot sup.	0	6
French polishing	" "	1	2
Preparing for and hanging paper	per piece,	2/-	to 4/-

*These prices apply to *new buildings* only. They cover superintendence by foreman and carry a profit of 10% on the prime cost without establishment charges. A percentage of 1½ should be added for Employers' Liability and National Health and Unemployment Acts and from 1s. 6d. per £100 for Fire Insurance. The whole of the information given on this page is copyright.

TRADE NEWS

Independent Electric Supply Plant.

To-day the application of electric light is as feasible in country houses, inns, hotels and public institutions as it is in the case of cities, thanks to the introduction of reliable and suitable plants. Many houses in the country remote from "laid-on" supplies are being equipped in an economical and satisfactory manner with these adaptable plants, which supply both light and power. One of these plants, the Automatic Petter-Light, supplies light to the Hunter's Lodge, a hostel well known in the West Country to tourists, on the main Axminster-road, about four miles from Lyme Regis. We learn that since its installation it has given great satisfaction. This installation is known as the Automatic Petter Light Plant, and is very compact, the whole apparatus being contained on one cast-iron baseplate.

New Grimsby Dock.

A formal contract has been signed between the Grimsby Corporation and Messrs. Sir Lindsay Parkinson and Co., Ltd., for the construction of the new Grimsby Fish Dock. The work will give direct employment to a very large number of men. There are over 1,200,000 cubic yards of earth to move, 57,000 cubic yards of concrete to lay, 250,000 tons of block chalk and river embankment to move. Well over 10,000 tons of cement, 50,000 cubic yards of gravel, and 25,000 cubic yards of sand will be used.

Automatic Thermal Water Storage.

An exhibit of more than usual interest at the Hairdressing Fair of Fashion (Olympia, Empire Hall, November 5-13) is a Potterton installation with a "Victor" automatic thermal storage apparatus. This yields an abundant supply of hot water, so we believe, with the greatest flexibility. Both night and day it maintains the water hot, with a consumption of 1.7 cu. ft. gas per hour—less than 2d. per day. Those that cannot visit Olympia to see the models in operation should write to Messrs. Thomas Potterton (Heating Engineers), Ltd., Cavendish Works, Ravenswood-road, S.W.12, for illustrated particulars.

A Fire Extinguisher.

On Thursday, October 30, on the ground of Messrs. Siemens Bros., Cable Works, Woolwich, S.E.17, Mr. Goodall, the inventor of the Rolls Fire Extincteur, carried out some tests with his invention. He first set light to the engine of a car and proceeded to put out the fire in a few seconds without any apparent damage to the vehicle. A further test was painting a wooden hut with tar, then throwing petrol over, firing it, and then extinguishing with the new portable fire extinguisher. This apparatus, we are informed, contains a solution that is stable only at its normal vaporising pressure, but is enabled to generate a higher pressure when coming in contact with the atmosphere. This solution is claimed not to damage the most delicate material, and is capable of throwing a continuous jet to a distance of 30 ft. The machine has metal joints, doing away entirely with leakage or evaporation, and can be operated with one hand.

The late Mr. George Mitchell.

We regret to record that Mr. George Mitchell, one of the managing directors of the Limmer and Trinidad Lake Asphalt Company, Ltd., died on Wednesday, October 29. He had been associated with the company for over twenty years, during which time he had seen it develop to its present strong position in the road and building business. Mr. Mitchell was Past-Master of the Paviors' Company, and among the many charitable organisations with which he was associated was the Brotherhood of Cheerful Sparrows, where he will long be remembered as their President.

TENDERS

Communications for insertion under this heading should be addressed to "The Editor," and must reach him not later than Tuesday evening.

* Denotes *accepted*.
† Denotes *provisionally accepted*.
‡ Denotes *recommended for acceptance*.
§ Denotes *accepted subject to modifications*.
¶ Denotes *accepted by H.M. Office of Works and H.M. War Office*.

Amersham.—18 houses, including drainage, fences and paths, on the first portion of the Chalfont St. Giles housing site, for the R.D.C. Messrs. Burgess Holden & Watson, architects, Beaconsfield, Bucks:—

	Contract No. 1 (6 houses)	Contract No. 2 (6 houses)	Contract No. 3 (6 houses)	Whole Scheme (18 houses)
Blareau & Horwood, Chorleywood	£3,290	£3,228	£3,450	£9,900
J. Bailey, Gerrard's Cross	2,910	2,790	2,935	8,630
Rust & Ratcliffe, Chesham	2,793	2,749	2,952	8,350
Edward Mills, Beaconsfield	2,460	2,468	2,592	7,480
Veness & Son, Chalfont St. Peter	2,384	2,368	2,554	7,306
T. L. Davies, Chalfont St. Peter	2,408	2,431	2,623	7,290
W. A. Hazell, High Wycombe	2,170	2,297	2,200	6,667
12 houses only				
A. E. Burbidge, Beaconsfield	2,837	2,810	2,804	—
6 houses only				
H. Newton, Chalfont St. Giles	2,720	2,776	2,906	—
F. Payne, Seer Green	2,455	2,405	2,811	—
Percy Parsons, Prestwood	2,647	—	—	—

Ashby.—Senior elementary school for girls at Ashby, Scunthorpe, for the Lindsey E.C. Mr. H. G. Gamble, County Architect, Bank-street Chambers, Lincoln:—

Wallhead Bros., Ruskington	£28,999
H. J. Thompson, Ltd., Scunthorpe	28,405
Stamp & Son, Barton-on-Humber	27,718
Knights (Contractors), Ltd., Doncaster	27,458
Pearson & Blackwell, Ltd., Doncaster	27,213
W. Pallister, Ltd., Scunthorpe	27,100
A. E. Mason, Gainsborough	26,845
R. M. Phillips, Brigg	26,103
T. Jenkinson & Son, Doncaster	25,900
†B. Pumfrey, Ltd., Gainsborough	25,447

Ashington.—Council school at Ashington Bothal to accommodate 800 scholars, for the Northumberland C.C. Mr. W. Tasker, County Architect, 17, Claremont-place, Newcastle-upon-Tyne:—

*J. J. Robson, of Blyth	£17,560

Aylesham.—Cottages for the R.D.C. Mr. E. D. Browne, clerk. Mr. E. R. Larner, building surveyor:—

Lamas, two pairs of type "C" cottages—	
*A. G. Hackwood, Aylesham	£1,786 0 0
Itteringham, one pair type "C" cottages—	
A. G. Hackwood, Aylsham	895 10 6

(Subject to approval of M.H.)

Banbury.—Alterations and extensions at Horley Home, for the Guardians Committee:—

*A. J. Hermon & Sons, King's Sutton, Northants.	

Banff.—Various trades in connection with the new infant school at Banff, for the Banffshire C.C. Mr. J. Wood, architect, Education Office, Buckie:—

Builder—*A. Davidson, Banff.
Joiners—*D. Slater & Son, Portknockie.
Plumber—*G. G. Bremner, Banff.
Plasterer—*A. T. Hutcheson, Banff.
Slaters—*C. Dickie & Son, 57, Balmellie-street, Turriff.
Painter—*R. Duncan, 35, Bridgend, Buckie.
Heating engineers—*Taylor & Fraser, 31, Argyle-street, Glasgow.
*Jas. Scott & Son, 485, Union-street, Aberdeen.
Metal windows—*Crittall Manfg. Co., 28, Royal Exchange-square, Glasgow.

Barnsley.—Excavation and construction of concrete retaining walls in connection with the new municipal buildings, for the C.B. Mr. A. D. Mason, Town Clerk:—

*T. Wilkinson & Sons (Builders), Ltd., Millhill-road, Sheffield	£9,542 19

Barrhead.—56 houses, for the T.C. Mr. William Baillie, architect, West Regent-street, Glasgow:—

*London & Inglis, Coatbridge.	

Belchamp.—14 parlour-type houses for the R.D.C. Mr. S. Allpress, surveyor, Sudbury, Suffolk:—

2 houses, Belchamp, Walter—*G. T. Elsdon, Hedingham.
4 houses, Bulmer—*G. T. Elsdon, Hedingham.
2 houses, Alphamstone—*Palmer & Corder, Hedingham.
2 houses, Belchamp, St. Pauls—*Palmer & Corder, Hedingham.
4 houses, Foxearth—*T. Martin & Sons, Clare.

Birmingham.—Shopfront and interior fittings at 87, New-street. Mr. Stanley A. Griffiths, architect:—

*A. Edmonds & Co., Ltd., Constitution Hill, Birmingham.	

Birmingham.—Handicraft, science and teachers' rooms at Benson-road school senior mixed department, for the E.C.:—

*W. & J. Webb, Birmingham	£2,873

Birmingham.—Handicraft, science and staff-rooms, etc., Acocks Green senior mixed school, and head teacher's room, staffroom and store, at the junior department, for the E.C.:—

*J. H. Parsons, Birmingham	£3,315

Birmingham.—Science room and store and improvements to cloakroom and staffroom, at the senior boys', junior and infants' departments, Boulton-road Council school, for the E.C.:—

*W. & J. Webb, Birmingham	£2,415

Birmingham.—Additional classrooms, domestic science rooms, staffrooms, cloakrooms, storerooms and corridors at the senior girls', junior and infants' departments of Nelson-street Council school, for the E.C.:—

*Maddocks & Walford, Erdington, Birmingham	£6,849

Birmingham.—Temporary school buildings at (*a*) Cranbourne-road, and (*b*) Peckham-road, Perry Barr, for the E.C.:—

(*a*) *Grosvenor Workman, Birmingham	£2,085
(*b*) *Grosvenor Workman, Birmingham	2,069

Birmingham.—Caretaker's house at Tedbury-crescent school, Erdington, for the E.C.:—

*J. Kendall, Ltd., Birmingham	£700

Bredbury and Romiley.—Erection of the "Peter Higson" memorial pavilion on the Bredbury recreation ground. Messrs. Wrathmell & Blackshaw, architects, Queen's-buildings, Stockport:—

*Fred. Booth & Sons, Hyde.	

Castleford.—Reconstruction of the abutments to the Lock-lane bridge over the Aire and Calder, for the West Riding C.C.:—

*E. C. Briggs.	

Chesham.—For (*a*) 20 houses of non-parlour 3 bedrooms semi-detached type on the housing site leading from Overdale-road at Pond Park, and (*b*) 30 houses of non-parlour 2 bedrooms semi-detached type on the same site, for the U.D.C. Mr. F. T. Moss, surveyor:—

Provis Thorne, Ltd., King's Langley	£23,780
Harry Harding, Chesham	21,930
Griffiths (Building Contractors), Ltd., Wembley	21,717
A. E. Massey, Chesham	19,589
Lee Bros. (Contractors), Ltd., Enfield	18,500
W. A. Hazell, High Wycombe	18,336
*Heels & Sugars, Ltd., Luton	17,250

Derby.—Shopfront at 62, Osmaston-road:—

*E. Edmonds & Co., Ltd., Constitution-hill, Birmingham.	

Driglington.—Engine house at the mill at Adwalton Common, for Messrs. Barron, Ltd.:—

*J. Clegg & Son.	

Easington.—Drainage scheme at Haswell, for the R.D.C. Messrs. D. Balfour & Sons, engineers, 3, St. Nicholas-buildings, Newcastle-on-Tyne:—

*H. Bell & Sons (Ryhope), Ltd., Ryhope	£59,976

Edmonton.—Plastering work at the library, for the U.D.C.:—

*Samuel Wright & Co.	£380

Gateshead.—Reorganisation of Nun's-lane, Prior-street and Oakwellgate schools, for the T.C.:—

*William Hall, Ltd.	£17,072

Glasgow.—198 houses, at Torbreck, for the Corporation. Mr. Robert Horn, Director of Housing:—

Builders—	
*Robert Sloan & Son, Ltd., Glasgow	£24,380 13 9
Joiner work—	
*John Laurence (Glasgow), Ltd., Glasgow	15,545 15 2
Plumber work—	
*Londen, Dunlop & Son, Glasgow	9,820 6 10
Slater work, etc.—	
*P. White & Son, Glasgow	3,274 5 10
Plaster work—	
*H. S. Bathgate, Glasgow	3,694 1 9
Glazier work—	
*Baillie & Telfer, Glasgow	563 12 11

Gravesend.—Sub-fire station on the King's Farm estate, for the T.C. Mr. H. H. Brown, Town Clerk, 4, Woodville-terrace:—

*R. Hopkins, Station Approach, Gravesend.	

Grays.—Proposed Oddfellows Hall in Dell-road, for the Independent Order of Oddfellows, Manchester Unity. Mr. Edward Fincham, A.R.I.B.A., P.A.S.I., architect, 4, Orsett-road, Grays. Quantities by Mr. W. J. Lowries, F.S.I., 9, Golden-square, W.1.:—

W. Silk & Sons, Ltd., Homerton, E.9	£8,722
F. Marshall, Grays	8,321
Allen Fairhead & Sons, Ltd., Enfield	8,311
F. E. Smith, Grays	8,300
G. Wallis & Sons, Ltd., Gravesend	8,269
H. W. Wilson, Ltd., South Ockendon	8,239
Pavitt Bros., Ltd., Aveley	8,103
Tokeley & Goodger, Grays	7,759
W. E. Walsham, Ltd., Grays	7,627
A. D. Jackson & Son, Southend	7,608
*Brown Bros., Ltd., Grays	7,331

Hailsham.—Sewerage and sewage disposal works at the village of Great Easton, for the R.D.C. Messrs. Coales & Green, chartered civil engineers, architects and surveyors, 36, High-street, Market Harboro'. Quantities by the architects :—

John M. Siddons, Oundle	£5,147 0 0
A. G. Tilley, Market Harboro'	2,623 15 0
H. V. Batchelor, Fleckney	2,579 7 0
W. W. Brown & Sons, Market Harboro'	2,531 0 0
H. H. Garlick, Market Harboro'	2,404 15 1
T. Bugbird & Son, Stamford	2,153 10 7
G. H. Greasley, Ltd., Leicester	2,071 10 2
T. Hickman & Sons, Market Harboro'	2,040 0 0
Matthew Arundel, Wakefield	1,990 0 0
*Gilbert, Norman & Janes, Great Bowden, Market Harboro'	1,795 5 0

Hinckley.—Plumber's shop and stores at reservoir grounds, for the U.D.C. Mr. J. S. Featherston, surveyor :—

*Greaves Bros., 83, Mount-road, Hinckley	£520

Horncastle.—Two pairs parlour type houses and two pairs non-parlour type houses, for the U.D.C. Mr. F. Wheeler, M.Inst. M. & Cy.E., surveyor, Foundry-street :—

F. Steadman, Horsington	£3,746 10 0
Lincoln Co-op. Society, Lincoln	3,560 0 0
†G. W. Horton & Son, Horncastle	2,799 2 6
J. Read & Son, Ruskington	2,710 0 0

Huddersfield.—New premises off Cowlersley-lane, Milnsbridge, for the Linthwaite Labour Club. Mr. J. Ainley, architect, 55, New-street, Huddersfield :—

Mason—
*G. Ainley & Son, Ltd., Crosland Moor... £725

Joinery—
*Garlick Bros., Meltham ... 350

Hull.—For (*a*) foundations and (*b*) super-structure for the Shell-Mex premises in Tudor-street, for the Corporation :—

*R. G. Tarran, Hull	(*a*) £8,604 (*b*) £46,970

Keadue.—Extension at the Tuberculosis Hospital, Keadue, for the Cavan County Board of Health :—

J. Tierney	£1,235
J. F. Conaty, Annagelliffe	1,119
J. Devine, Belturbet	1,085
*T. M'Manus, Market-square, Cavan	950

Kempston.—8 parlour-type and 12 non-parlour type cottages for the U.D.C. Messrs. W. B. Stonebridge & H. A. Harris, architects, 26, St. John's-street, Bedford :—

W. T. Revitt, Olney, Bucks	£10,279
W. T. Glass & Son, Bedford	10,052
Warton & Goodship, Bedford	10,045
R. Marriott, Rushden	9,357
J. C. Tarry, Newport Pagnell	8,748
C. A. White, Bedford	8,715
*S. Foster, Ltd., Kempston, Bedford	8,572

(Subject to approval of M.H.)

Kincardine.—Reconstruction of the Luther Bridge, for the C.C. :—

*A. Adamson, Laurencekirk	£3,154 1 6

Kingston-on-Thames.—For the internal decoration of 140 houses on the Corporation housing estate :—

*Ides, Ltd.	£401 16

Kingston-upon-Hull.—New hospital at Willerby, for the Mental Hospital Committee :—

*R. G. Tarran, Ryde-avenue, Hull	£23,607

Knaresborough.—Alterations and extensions to the "Elephant and Castle" Hotel, for Mr. L. B. Steel, proprietor. Mr. C. F. Burton, F.R.I.B.A., chartered architect, George-street, West Hartlepool :—

*Wm. Birch & Sons, Ltd., York	£7,150

Leavesden.—Division of the wards of certain blocks and necessary consequential alterations at Leavesden mental hospital, for the London C.C. :—

*C. Miskin & Sons	£3,915

¶**London.**—The following works contracts have been placed by the War Office during the week ending October 30, 1930 :—

Caterham—erection of gymnasium, J. B. Edwards & Co. (Whyteleafe), Ltd., London.
Blackdown—married soldiers' quarters and vehicle shed, J. B. Edwards & Co. (Whyteleafe), Ltd., London.
Woolwich, Royal Artillery Barracks—repairs to single officers' quarters, Thomas & Edge, Ltd., Woolwich.
Feltham, R.A.S.C. M.T. Depot—external and internal painting, A. Bagnall & Sons, Ltd., Shipley.
Northampton—term contract, A. & L. Chowns, Ltd., Northampton.
Weedon and Northampton—periodical painting, A. A. McDermott & Sons, Ltd., Bradford.
Portsmouth—artificers' work—Cortis & Hankins, Drayton.

¶**London.**—Tenders accepted by H.M.O.W. for the week ending October 31 :—

Brentwood T.E.—alterations and additions, Evans & Nunn, Ltd., 44, London-road, Clacton-on-Sea.
Wolverhampton E.E.—erection, W. Kendrick & Son, Ltd., Tasker-street, Walsall.
Portslade T.E.—alterations and additions, McKellar & Westerman, Ltd., 136, Church-road, Hove.
Sheldon T.E., Birmingham—erection, Parsons & Morrin, Ltd., 133, Belgrave-road, Birmingham.
Belfast Parliament Buildings—ventilation, G. N. Haden & Sons, Ltd., Lincoln House, 60, Kingsway, W.C.2.

London.—Remodelling Droop-street Council school, Paddington, for the L.C.C. :—

	Materials from any source	*Alternative for British materials.*
Hammond & Barr, Ltd.	£20,493 0 ...	(*a*)
Patman & Fotheringham, Ltd.	20,491 0 ...	(*a*)
Albert Monk	19,834 0 ...	£20,099 0
John Marsland & Sons, Ltd.	19,464 0 ...	19,899 0
F. R. Hipperson & Son	19,372 14 ...	(*a*)
Wm. Akers & Co., Ltd.	19,264 0 ...	(*a*)
W. H. Gaze & Sons, Ltd., Kingston-on-Thames	18,963 0 ...	19,172 0
Leslie & Co., Ltd.	— ...	18,855 0
John Garrett & Son, Ltd.	18,718 0 ...	18,793 0
G. E. Wallis & Sons, Ltd., Maidstone	18,661 0 ...	18,873 0
James Smith & Son (Norwood), Ltd.	18,102 0 ...	18,136 0
Triggs & Co., Ltd.	17,983 0 ...	(*a*)
Lole & Co., Ltd.	17,583 0 ...	(*a*)
C. P. Roberts & Co., Ltd.	17,600 0 ...	(*a*)
J. & C. Bowyer, Ltd., Upper Norwood, S.E.19	17,547 0 ...	(*a*)

(Architect's estimate on basis (i.) £17,000.)
(*a*) No variation.
(All of London.)

London.—Enlargement of Huntingfield-road Council school, Putney, for the L.C.C. :—

	Materials from any source.	*Alternative for British materials.*
Humphreys, Ltd.	— ...	£15,861 0
R. Dixon & Sons	£15,047 19 ...	15,234 9
Rowley Brothers (1929) Ltd.	14,643 0 ...	15,133 0
Wm. Akers & Co., Ltd.	14,361 0 ...	—
James Carmichael (Contractors), Ltd.	14,183 0 ...	(*a*)
C. H. Gibson, Ltd.	13,949 0 ...	(*a*)
Leslie & Co., Ltd.	13,872 0 ...	—
Hammond & Barr, Ltd.	13,736 0 ...	13,971 0
James Smith & Sons (Norwood), Ltd.	13,580 0 ...	13,680 0
Perrys (Ealing), Ltd., Ealing	13,353 0 ...	(*a*)
*W. H. Gaze & Sons, Ltd., Kingston-on-Thames	13,293 0 ...	(*a*)
Cropley Brothers, Ltd., Epsom (withdrawn)	12,279 0 ...	12,314 0

(*a*) No variation.
(Remainder of London.)

London.—Repairs and decorations at No. 340, Brixton-road, for the Lambeth B.C. :—

S. A. Miller, Thornton Heath	£226 6
T. Brown & Son (Herne-hill), Ltd., S.E.24	189 0
G. Brittain & Sons, Ltd., Kennington	187 10
A. Walker, S.W.17	175 0
A. D. Johnson, S.E.14	174 12
*Hawkins & Co., Norwood-road, S.E.27	122 10

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London.—Internal redecorations, including the provision of picture and specimen rails and external repairs, at the Jews' free school, Whitechapel, for the L.C.C. :—

Trollope & Colls, Ltd.	£6,402
Ashby & Horner, Ltd.	6,346
Hall, Beddall & Co., Ltd.	5,545
Bovis, Ltd.	5,530
James Carmichael, Ltd.	5,342
Tavener & Son	4,757
*F. & H. F. Higgs, Ltd., Station-works, Hinton-road, S.E.24	4,364

London.—Wiring and fitting for electric lighting, etc., at Westminster technical institute, for the L.C.C. :—

Ellis & Ward, Ltd.	£4,794 0
Smethurst & Co. (London), Ltd.	3,696 0
H. J. Cash & Co., Ltd.	3,198 10
J. Briggs, Electrical Contractors, Ltd.	3,113 0
Pinching & Walton	3,098 0
A. Dean & Co., Ltd.	3,030 0
The Berkeley Electrical Engineering Co., Ltd.	2,983 0
Alex. Hawkins & Sons	2,919 0
Electrical Installations, Ltd.	2,601 0
*L. G. Tate & Co., Ltd., 38 Bucklersbury, E.C.4	2,358 0

(Chief Engineer's estimate £2,975.)
(All of London.)

London.—Structural alterations and the erection of a schoolkeeper's house at Hackney-downs school, for the L.C.C. :—

	Materials from any source.	*Alternative for British materials.*
George Barker	£9,182 0 ...	(*a*)
E. A. Roome & Co., Ltd.	9,100 0 ...	£9,185 0
G. H. Denne & Son., Ltd.	8,952 0 ...	(*a*)
S. Shaw	— ...	8,754 0
C. R. Price	8,747 0 ...	(*a*)
G. Keetch & Sons	8,481 0 ...	8,535 0
J. W. Trudgett, Colchester	— ...	8,164 0
Canonbury Construction Co., Ltd.	7,880 0 ...	—
Stapleton & Sons	7,869 0 ...	8,019 0
H. Lacey & Sons, Luton	7,859 0 ...	(*a*)
Griggs & Son, Ltd.	7,800 0 ...	—
C. P. Roberts & Co., Ltd., 31-3, High Holborn, W.C.1	7,547 0 ...	(*a*)

(Architect's comparable estimate £8,311.)
(*a*) No variation.
(Remainder of London.)

London.—Partitions* at child welfare centre at Eltham, for the Woolwich B.C. :—

*Sayce & Bransby	£222 5

London.—Oak wall pannelling, stall board, etc., at the showroom and offices, Eltham High-street, for the Woolwich B.C. :—

*Courtney, Pope & Co.	£275

London.—Small section of wall between the existing boundary wall at the eastern end of the Council's new cemetery and Gunnersbury-park, for the Kensington B.C. :—

*A. Roberts & Co., Ltd., 74, Earl's Court-road, S.W.5	£100

London.—For (*a*) 24 dwellings at Chivers-court, Limehouse; and (*b*) 10 dwellings in Narrow-street, Limehouse, for the Stepney B.C. Borough Engineer and Surveyor :—

(*a*)

S. E. Moss & Sons, Chelmsford	£16,578 14 10
F. R. Hipperson & Son	16,123 0 0
R. Mansell	15,450 0 0
Building Works Manager	15,346 0 0
Thomas & Edge, Ltd.	15,190 0 0
*Commercial Structures, Ltd., 38/44, Canal-road, N.	13,610 0 0
Borough Engineer and Surveyor's estimate	14,828 0 0

(*b*)

S. E. Moss & Sons, Chelmsford	£7,741 8 5
F. R. Hipperson & Son	7,698 0 0
Building Works Manager	7,255 0 0
Thomas & Edge, Ltd.	7,238 0 0
R. Mansell	7,080 0 0
H. King & Son (Peckham), Ltd.	6,700 0 0
*Commercial Structures, Ltd., 38/44, Canal-road, N.	6,480 0 0
Borough Engineer and Surveyor's estimate	7,044 0 0

London.—Construction of the western approach to the new Barking-road bridge, for the L.C.C. Messrs. Rendel, Palmer & Tritton, engineers :—

G. Shellabear & Son, Ltd., Plymouth	£112,536 0 0
John Cochrane & Sons, Ltd.	112,107 0 0
Walter Scott & Middleton, Ltd.	109,674 12 8
Edmund Nuttall & Sons, Ltd., Manchester	108,571 3 8
Charles Brand & Son	103,841 5 8
George Wimpey & Co., Ltd.	97,991 12 4
Sir Lindsey Parkinson & Co., Ltd.	97,749 11 9
D. G. Somerville & Co., Ltd.	96,913 13 2
Walter Lawrence & Son, Ltd.	95,989 15 4
John Mowlem & Co., Ltd.	95,595 18 7
Thomas & Edge, Ltd.	95,515 0 3
A. Jackaman & Son, Ltd., Slough	95,005 9 6
Holloway Brothers (London), Ltd.	94,095 18 8
Stewart & Partners, Ltd.	90,491 14 8
*Shanks & McEwan, Ltd., 26, West Nile-street, Glasgow	89,697 8 2
Engineer's estimate	107,000 0 0

(Remainder of London.)

London.—Tenders accepted by H.M. Air Ministry for the week ending October 25:—

Air Compressors (various stations)—Reavell & Co., Ltd., Ranelagh Works, Ipswich.

Officers' married quarters (Aldergrove)—H. Laverty & Sons (Belfast), Ltd., Cambridge-street, Belfast.

London.—Installation of heating, hot water, etc., apparatus in the admission villa at Hanwell mental hospital, for the L.C.C.:—

The Brightside Foundry & Engineering Co., Ltd.	£5,178
The Fretwell Heating Co.	4,985
W. G. Cannon & Sons, Ltd.	4,694
Buckleys (London), Ltd.	4,650
The Falkirk Iron Co., Ltd.	4,415
*H. J. Cash & Co., Ltd.	4,348
Chief Engineer's estimate	4,475

(All of London.)

London.—Minor structural alterations at Greenwich-park central girls' school, for the L.C.C.:—

	Basis (i)		*Basis (ii)*
Hill & Gurr	£2,666	...	£2,721
William Bailey & Sons (Builders), Ltd.	2,100	...	——
H. H. Hollingsworth & Son	2,043	...	2,060
Henry Kent (Builders), Ltd.	1,994	...	2,017
W. Mills & Sons (Builders and Contractors), Ltd.	1,990	...	——
Thomas D. Leng	1,915	...	(a)
Harry Groves & Son	1,877	...	(a)
H. W. Spinks	1,825	...	(a)
W. J. Dixon & Sons	1,787	...	——
*H. King & Son (Peckham), Ltd., 2a, Commercial-road, Peckham, S.E.15	1,749	...	(a)
H. & J. Taylor, Hither Green	1,290	...	1,310
Architect's comparable estimate, on first basis	1,967	...	——

(a) No variation.

(All of London.)

London.—Enlargement of Launcelot-road Council school, Lewisham, for the L.C.C.:—

	Basis (i)		*Basis (ii)*
Hill & Gurr	£2,285	...	£2,362
Wm. Akers & Co., Ltd.	1,997	...	(a)
Edwards Construction Co., Ltd.	1,980	...	(a)
Thomas & Edge, Ltd.	1,953	...	(a)
Cole Lousby & Co., Ltd.	1,945	...	——
Thomas D. Leng	1,864	...	(a)
W. Mills & Sons (Builders & Contractors, Ltd.	1,860	...	——
Harry Groves & Son	1,759	...	(a)
H. & J. Taylor	1,743	...	1,765
Andrew Black & Son	1,715	...	1,777
*W. J. Dixon & Sons, 1, Blue Anchor-lane, Bermondsey, S.E.1	1,619	...	(a)
Architect's estimate on first basis	1,803	...	——

(a) No variation.

(All of London.)

(i) Basis of all materials, except timber and a portion of the roof tiling, being of British manufacture, and the joinery being manufactured entirely within the British Empire, and

(ii) Same basis as the above, with the addition that timber is to be supplied wholly from the British Empire.

London.—Retiling roofs at Banstead mental hospital and at the Ewell colony, for the L.C.C.:—

	Banstead. Per square. s. d.		*Ewell.* Per square. s. d.
Bingley, Son & Follitt, Ltd.	82 6	...	82 6
Stirling & Johnson, Ltd.	72 6	...	72 6
J. J. Etridge, Jnr., Ltd.	70 0	...	65 0
Roberts, Adlard & Co., Ltd.	71 6	...	61 6
*John Macquire	61 0	...	57 0

(All of London.)

Long Eaton.—For (a) 6 non-parlour houses in Wellington-street and 62 on Longmoor estate, and (b) 30 houses on Bonsall-street, for the U.D.C. Mr. H. Raven, architect:—

(a) *F. E. Stevens, Long Eaton £30,055
(b) *H. Hunt & Sons, Ripley, Derby 11,815

Milnsbridge.—Pair of houses in Park-road, Milnsbridge. Mr. J. Ainley, architect and surveyor, 55, New-street, Huddersfield.

Mason—
*J. Timmins, Ltd., Dalton £411 4 0

Joiner—
*J. M. Moorhouse, Meltham 165 0 0

Mullingar.—12 houses, for the Town Commissioners:—

William Ennis	£5,179
Charles Doyle	4,145
*J. Sexton	4,145
Michael Kelly Tyrrellspass	3,814

Mutford and Lothingland.—For (a) 8 houses and (b) 4 houses at Kessingland, for the R.D.C.:—

*S. D. Woodyard, Holton ..... (a) £2,648
(b) £1,216

Nelson.—Bridge over the Leeds and Liverpool canal, near Hodge House, Nelson, for the T.C. Mr. F. V. Alexander, Borough Surveyor:—

*T. Varley & Son, Ltd., Blackburn

Newcastle-upon-Tyne.—For (1) 177 houses on section D of St. Anthony's housing estate; and (2) 4 houses on Pendower housing estate, for the C.B. Housing Architect, 18, Cloth Market:—

W. D. Allison, Whitburn	(a)	£58,834 4
Alex. Anderson, Newcastle	(a)	57,706 0
	(b)	*1,368 0
	(c)	59,000 0
Gustavus Bailey, Ltd., South Shields	(a)	*55,671 4
George G. Carr, Newcastle	(a)	57,917 0
	(b)	1,428 0
	(c)	59,305 0
R. Carse & Son, Ltd., Amble	(a)	57,117 0
A. V. Clerey & Sons, Sunderland	(a)	60,180 0
	(b)	1,600 0
	(c)	61,780 0
Jas. E. Dover, Blyth	(b)	1,635 10
J. S. Hetherington, Newcastle	(a)	55,911 0
	(b)	1,386 0
	(c)	57,299 0
Harry Kindred, Sunniside	(b)	1,385 8
Noble & Son, Ltd., Newcastle	(a)	58,557 0
	(b)	1,440 0
	(c)	59,997 0
Nordmann & Sons, Ltd., Dunston	(a)	57,878 15
	(b)	1,440 0
	(c)	59,318 0

(a) St. Anthony's (177 houses); (b) Pendower (4 houses); (c) both estates.

NOTE.—The tenders for the houses at Pendower are based upon the use of plain tiles for roof covering, and for the houses at St. Anthony's upon the use of slates at the provisional price of 6s. per yard super.

Oadby.—14 houses on a site situate on Regent-street, for U.D.C. Mr. G. E. Fryer, engineer and surveyor:—

Gamble, Kibworth, Leicester	£6,580
L. Weston, Oadby	5,975
Greenwood and Taylors, Leicester	5,572
Gilbert, Norman & James, Gt. Bowden, Market Harborough	5,460
Fox & Co., Leicester	5,040
Chapman & Son, Markfield	4,999
A. E. Tate & Co., Oadby	4,765
Cox & Co., Leicester	4,740
*Jewell & Son, Dunkirk, Nottingham	4,620

Poole-in-Wharfedale.—Extensions to the paper mills, for Messrs. B. S. & W. Whiteleys, Ltd. Messrs. Nichol & Nunn, engineers, Market-street, Bradford:—

*M. Booth & Son.

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Portsmouth.—Administrative offices in Highland-road, for the Corporation. General Manager, Tramways Office. Messrs. Henry J. Dyer and Sons, architects and surveyors. Quantities by the architects:—

William Moss & Sons, Ltd., London	£21,540
John Hunt, Ltd., Gosport	21,068
Theo. Conway, Ltd., Weymouth	20,997
G. J. Davis & Sons, Southsea	19,997
Roy Corke, Ltd., Southsea	19,960
Frank Bevis, Ltd., Portsmouth	19,950
John Lay & Co. (Portsmouth), Ltd., Portsmouth	19,678
Howe & Bishop, Francis-avenue, Southsea	19,743
E. & A. Sprigings, Portsmouth	19,209
*Samuel Salter (Portsmouth), Ltd., Yorke-street, Southsea	19,190

Puckane.—School at Puckane:—

*P. Leamy, Cloughjordan £400

Ripon.—Work in connection with the Corporation assisted wiring scheme, for the T.C. Electrical Engineer and Manager:—

*G. H. Smith & Sons, 23, Blossomgate, Ripon.
*Brady & Mann, 16, North-street, Ripon (*accepted subject to fixed price per point*).

Rochdale.—Painting at Birch Hill Institution, Dearnley, near Rochdale, and also at Cottage Homes, Middlewood, Wardle, near Rochdale, for the C.B. Mr. Wm. H. Hickson, Town Clerk:—

*A. & J. W. Lord, Rochdale.

Rugeley.—60 houses on the Hagley estate, for the U.D.C. Mr. W. E. Rogers, architect, Anson-street. Quantities by Mr. F. Lloyd Ward, A.R.I.B.A., of Birmingham:—

Russhouse & Gregory, Wednesfield	£31,260 0 0
Morley & Son, Derby	26,776 10 0
Barker & Son, Loughborough	26,750 0 0
Hy. Boot & Son, Sheffield	25,837 4 0
J. Hudson, Rugeley	25,222 4 4
*Mason & Sons, Albion-street, Rugeley	20,978 10 0

(Subject to approval of M.H.)

Salford.—Supply and delivery of wrought-iron entrance gates and boundary railings for the Liverpool-street recreation ground, for the City Council:—

*Hill & Smith, Ltd., Brierley Hill £387 11 3

Salford.—Electric wiring of thirty-six houses in Lichfield-street, Pendleton, on the Gerald-road rehousing estate, for the T.C.:—

*F. Bainbridge, Manchester £370

Salford.—Extension of the switch-house building at Agecroft Power Station, for the T.C.:—

*W. Gornall & Sons, Ltd., Salford ... £4,917

Scotter.—Elementary school at Scotter, between Scunthorpe and Gainsborough, for the Lindsey E.C. Mr. H. G. Gamble, County Architect, Bank-street Chambers, Lincoln:—

Wallhead Bros., Ruskington	£12,399 0 0
Knights (Contractors), Ltd., Doncaster	12,262 17 4½
Thornhill Bros., Lincoln	12,251 19 0
Pearson & Blackwell, Ltd., Doncaster	12,071 19 7
R. M. Phillips, Brigg	11,643 0 0
W. Pallister, Ltd., Scunthorpe	11,420 0 0
W. A. Major, Sturton-by-Stow	11,409 0 0
T. Jenkinson & Sons Ltd., Doncaster	11,200 18 6
B. Pumfrey, Ltd., Gainsborough	11,019 0 0
H. Derrington & Son, Gainsborough	10,845 11 9
†A. E. Mason, Gainsborough	10,800 0 0

Skipton.—Public conveniences at Grassington, for the R.D.C. Mr. A. Rodwell, surveyor:—

*A. Maxwell & Son, Grassington, near Skipton £615

Stapleford.—Sewerage works at Bramcote, for the R.D.C. Messrs. Elliott & Brown, engineers, Burton-buildings, Parliament-street, Nottingham. Quantities by the engineers:—

Raynor, Hustwayte & Co., Sherwood	£1,958 6 0
Earnshaw & Son, Ltd., Ilkeston	1,622 0 0
Bentley & Wardman, Bradford	1,495 10 2
H. H. Barry, Radcliffe-on-Trent	1,493 9 2
D. Roberts & Son, Nottingham-road	1,440 0 0
J. Brett & Co., Preston	1,386 19 7
G. H. Graham, Huddersfield	1,335 15 0
G. T. Rice & Co., Ltd., Beeston	1,262 0 0
*J. Thraves, Glenfield, Stapleford	1,101 15 0

Stoke-on-Trent.—Sub-station in Belgrave-road, Dresden, Longton, for the Corporation. Messrs. Cotton, Son & Hulme, architects, Piccadilly, Tunstall, Stoke-on-Trent:—

*Naylor & Nutt, Stoke-on-Trent £806

Sudbury.—New premises for the Midland Bank, Ltd. Messrs. Ricock & Sutcliffe, FF.R.I.B.A., architects, 60, Strand, W.C.2. Quantity surveyors, Messrs. Gardiner & Theobald, 98, Gower-street, W.C.1:—

A. G. Scott	£2,947
Franks & Simons	2,657
H. H. Hollingsworth & Son	2,492
T. H. Kingerlee & Sons	2,458
G. Potton & Sons	2,450
J. T. Luton & Son, Ltd.	2,449
H. L. Holloway & Son	2,383
Hall & Dixon, Ltd.	2,253
Henry Kent, Ltd.	2,182
Wm. Nicholson & Son	2,180

Sunderland.—Alterations and extensions to premises in Villiers-street and Broughton-road, for the Sunderland and Durham County Incorporated Royal Institution for the Blind. Mr. O. Hall Mark, Education Architect, 15, John-street:—

*J. Huntley & Son, Sunderland.

Tanfield.—72 houses at Leazies, for the U.D.C. Mr. J. R. Heslop, surveyor:—

*R. Barron & Co., Ltd., Bishop Auckland.

Tavistock.—4 houses at Princetown, for the R.D.C. Mr. T. H. Harris, architect:—

F. T. Eales, Ashburton (*inclusive*)	.....	£2,245
Halfyard Bros., Princetown	...(*houses*)	1,750
	(*road, etc.*)	148
*R. Toop & Son, Horrabridge	...(*houses*)	1,600
	(*road, etc.*)	200

Tralee.—For (a) 16 2-story houses in concrete blocks with Irish slate roofs, and (b) 14 of the same type, for the U.D.C.:—

(*a*) ?Fitzgerald & Sullivan, Tralee £503 each
(*b*) ?W. Myles, Tralee ..... 503 each

Trawsfynydd.—Improvements to Chapel House at Ty High-street. Mr. J. R. Jones, architect, Llys Addysg Trawsfynydd:—

*R. Roberts, Blaendell, Trawsfynydd.

Tynemouth.—104 houses on the Balkwell housing site, for the T.C. Mr. John L. Beckett, A.M.I.C.E., A.M.I.Mech.E., Borough Surveyor. Quantities by the Borough Surveyor:—

*J. Carruthers & Son, Brislee-avenue, Tynemouth £34,122 8 3

Waen Llanwnog.—House and cowhouse at Waen, Llanwnog, for the Montgomery C.C. Mr. E. R. Pulestgn Jones, County Land Agent, Welshpool:—

*Thomas & Benbow, Saw Mills, Caersws.

West Lancashire.—Light steel bridge over River Douglas, at Tarleton, near Preston, for the R.D.C. Mr. H. B. Ward, consulting engineer, 25, North John-street, Liverpool:—

*F. Morton & Co., Ltd., Garston, Liverpool.

Wayland.—Two pairs of houses at Larling, near the Chapel, for the R.D.C. Mr. A. A. Gompertz, Clerk, Watton:—

G. H. Norgate, Wreningham	£1,513
W. Peeke, Vont & Son, Watton	1,195
H. C. Tofts & Sons, Attleborough ...	1,190
Claude E. Pearson, Forncett St. Peter	1,148
*S. Tennant & Sons, Watton	1,100

Weymouth.—Harbour improvements to provide fresh berthing accommodation for the T.C.:—

*Bolton & Lakin, Birmingham £88,785

Winslow.—6 pairs and 3 pairs of non-parlour type cottages, for the R.D.C. Mr. H. Cripps, surveyor, Winslow:—

Mursley—

Fleet & Roberts, Aylesbury	£2,883
W. Clarke & Sons, Stewkley	2,506
*W. J. Thresher, Aylesbury	2,380

North Marston—

Fleet & Roberts, Aylesbury	4,005
T. J. N. Cannon, Whitchurch	4,190
*W. J. Thresher, Aylesbury	3,700

Woking.—30 houses in Boundary-road, for the U.D.C.:—

*Guildford Guild of Builders £6,630

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